

HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

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STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

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JANUARY, 1937

No. 1

Edited by

STEWART G. THOMPSON, D.P.H., Member
American Medical Editors' and Authors' Assn.

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W. A. McPHAUL, M.D., STATE HEALTH OFFICER
Jacksonville, Florida

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W. A. McPhaul, M.D.

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Epidemiology.....	
Sanitation.....	T. S. Kennedy, M.D.
Public Health Nursing.....	Ruth E. Mettinger, R.N.
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Pensacola.....	Nina Branch
Tallahassee.....	Estelle Bryan
Tampa.....	H. D. Venters, B.S.

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Marianna.....	W. W. Miller (Acting)
Ocala.....	C. A. Holloway
Tampa.....	Russell Broughman
West Palm Beach.....	S. D. Macready

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Jacksonville.....	Johanna L. Sogaard, R. N.
Jacksonville.....	Lalla Mary Goggans, R.N.
Jacksonville.....	Julia O. Graves, R.N.
Marianna.....	Vandilla Strickland, R.N.
Tampa.....	Mary Hitchcock, R.N.

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Tallahassee, Leon County.....	L. J. Graves, M.D.
Pensacola, Escambia County.....	W. H. Pickett, M.D.
Marianna, Jackson County.....	R. N. Joyner, M.D.
Ft. Lauderdale, Broward County.....	Paul G. Shell, M.D.
Perry, Taylor County.....	C. A. O'Quinn, M.D.
Quincy, Gadsden County.....	C. W. McDonald, M.D.
Key West, Monroe County.....	W. P. Rice, M.D.
Clearwater, Pinellas County.....	T. E. Morgan, M.D.
Tampa, Hillsboro County.....	J. S. Spoto, M.D.
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Apalachicola, Gulf—Liberty—Calhoun—Franklin County.....	J. W. McMurray, M.D. (Acting)

STATE DAIRY SUPERVISOR

Jacksonville.....	A. H. Williamson, D.V.M.
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MALARIA RESEARCH

Tallahassee.....	Mark F. Boyd, M.D. (Rockefeller Foundation)
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CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph.D. (U. S. Bureau Entomology)
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ADMINISTRATION**W. A. McPhaul, M.D., State Health Officer****OBSTETRICS AND PEDIATRICS**

Refresher courses in obstetrics and pediatrics will be inaugurated in the northern part of Florida during the months of January and February. Six cities have been chosen for the lectures and will be within seventy-five miles of any locality. The same lectures will be repeated in each of the six cities on succeeding nights of the same week. Therefore, if a physician misses the lecture in one locality, he may, by traveling an additional distance, hear the same lecture the following night. Each community will receive a different group of lecturers on the same night of the week for the six successive weeks.

In order to make the program of interest to all members of the medical profession, the Committee on Maternal and Child Health of the Florida Medical Association in cooperation with the Bureau of Maternal and Child Health of the State Board of Health have attempted to provide lecturers from the various specialties. The faculty who will conduct the refresher courses of instruction are as follows:

The lectures on obstetrics will be given by: Dr. E. L. King, formerly associated with Tulane University; Dr. Russell H. Oppenheimer, dean of Emory University; Dr. William H. Vogt, St. Louis University; Dr. Fred J. Taussig, Washington University of St. Louis; Dr. E. D. Plass, University of Iowa, and Dr. Frederick H. Falls, University of Illinois.

The lectures on pediatrics will be given by: Dr. Robert A. Strong, Tulane University; Dr. William A. Mulherin, University of Georgia; Dr. H. R. Casparis, Vanderbilt University; Dr. Lawson Thornton, Orthopedic Surgeon, Atlanta; Dr. J. J. Shea, University of Tennessee, and Dr. Edward A. Park, Johns Hopkins University.

The itinerary of the group will be as follows: Marianna, January 12, 19, 26 and February 2, 9, 16; Pensacola, January 11, 18, 25 and February 1, 8, 15; Tallahassee, January 13, 20, 27 and February 3, 10, 17; Ocala, January 14, 21, 28 and February 4, 11, 18; Live Oak, January 15, 22, 29 and February 5, 12, 19; Jacksonville, January 16, 23, 30 and February 6, 13 and 20.

The institutes are so constructed that they will be a review of the subject and at the same time bring to the practitioners of Florida the newer ideas which have been found to be practical and worthy of acceptance. In the communities where these programs will be presented, they are brought at the invitation of the local medical society. All members of the county medical societies are urged to attend the refresher courses in obstetrics and pediatrics.

These medical educators are being brought to Florida at the expense of the Bureau of Maternal and Child Health of the Department of Labor under the Federal Social Security Board.

BUREAU OF DENTAL HEALTH**E. C. Geiger, D.D.S., Director****TEETH AS AN AID TO BEAUTY**

A beautiful set of even, flashing teeth is one of the greatest assets in satisfactory beauty culture. Imperfect teeth will mar the most beautiful face, and conversely, attractive teeth more than compensate for lack of good looks.

The expression, "I wish mother had cared more for my teeth when I was small," has been heard by dentists many times from young ladies. These people do not speak in criticism but wistful regret. Their complexion may be petal-smooth and features flawless, yet their beauty is marred by uneven, poorly formed teeth.

The same condition is true in men and in many instances a successful business career is dependent upon public contact and attractive teeth represent a business asset. A person with beautiful teeth will smile readily and without reservation. A psychological complex may result from unattractive teeth and this may influence an entire personality.

Every child is entitled to a life-time inheritance of normal teeth and this is made possible by proper care beginning early in life. Perfect teeth contribute a large part toward the future success of the child's business and social life. They are bound to contribute to good health. Children should visit their dentist regularly beginning about the age of three years. In this way the child is properly acquainted with a dentist before a painful condition arises.

Four points for parents to follow in assuring a child a good set of teeth are:

1. Proper mouth hygiene according to the method advised by the family dentist.
2. A proper diet including milk, leafy vegetables, fruit, and sea foods. Physical exercise, fresh air, and sunshine are most important if a desire and subsequent utilization for wholesome foods are to be created.
3. Stimulation of teeth and gum tissue by use of bread crusts, raw vegetable salads, and chewing gum.
4. Regular professional dental attention.

The structure of the child's first teeth depends on the diet of the mother during the months preceding birth of the child. The normal structure and arrangement of the secondary teeth depend on the diet of the child and the retention of the first teeth until the normal shedding time. May we remember "it is more desirable to build a strong healthy child than to repair an adult."

BUREAU OF PUBLIC HEALTH NURSING**Ruth E. Mettinger, R.N., Director****PUBLIC HEALTH COUNCILS**

Team work is the key to success in any public health program. There is need for joint counseling between agencies and people so that duplication can be avoided and the program can be successfully launched. Without the interest of the community, a public health nursing service would soon die. The community feels more interest and takes more responsibility for the development of the service when it has an active part in its activities. The best way to create this interest is to give an intimate knowledge of the service through a Public Health Nursing Committee or Council, with representatives from all organizations in the community. The nurse should only be an ex-officio member of the committee, attending the meetings monthly and giving a report of the work. Her place in the organized program is to represent, by actual work in the field, a body which in turn represents the community itself, and unless there is such a body back of her, her work loses significance.

From this committee, small or sub-committees can be appointed to assume the responsibility of certain sections of the county or different phases of the program. The size of the committee is determined by the number of organizations in the county which should be represented and should include people of various religious groups. The qualifications of the person is an important factor when selecting members. Unless they are willing to attend meetings regularly, are open-minded, interested in public health and have vision, they will be of little or no value to the committee. No one should be over-persuaded to work against his or her better judgment, and dependability should be expected. Developing a public health committee takes time, thought and guidance on the part of the public health nurse.

Delegating duties to the various members will create a greater and continued interest. Several committees have made and distributed sterile obstetrical packages; organized classes in home hygiene; have transported patients to conferences, clinics, hospitals, and assumed the responsibility of a "loan closet." It is desired for each member of the committee to take the course in Home Hygiene and Care of the Sick.

This committee should be prepared to interpret the services to the community, acting as an educational medium between the nurses and the public as a whole, should stimulate the community to assume a civic responsibility, and to give support to the nursing service. Not only does the nurse gain prestige from such a committee, but she receives valuable advice and is very often guarded against unjust criticism.

BUREAU OF PUBLIC HEALTH NURSING

In order to have an effective and functioning committee, a regular schedule for monthly meetings should be maintained with a well prepared program and lively and intelligent discussions. The responsibility of the discussion is often placed on the chairman of the committee, and brings out within the group a better understanding of the different phases of the work.

Other ways of interesting the committee and familiarizing them with the work of the public health nurse are to arrange for their attendance and assistance with the midwife institute, tuberculosis clinics, and prenatal, infant and preschool conferences, and crippled children clinics.

People should know what the public health nursing service is and what it aims to accomplish for the community. This implies well rounded and continuous publicity, talks, news articles and window displays. A special person should be appointed for this important part of the committee program.

Frequently the committee can assist with the weighing of school children, notifying schools of intended visits of the nurse, and sending follow-up notes to the parents.

"Volunteer service, recruited wisely by some responsible person, placed thoughtfully, trained adequately and supervised thoroughly, with a demand for the same standards as one would ask from paid service, should prove an asset to any public health nursing organization and far out-balance the liabilities in using volunteers in the program." (The Public Health Nurse, page 38, January, 1931).

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

VALUE VERSUS COST

Following a precedent set by the Connecticut State Board of Health in its successive annual reports, we recently calculated the amount that would have had to be paid for all the tests made by the Bureau of Laboratories of the State Board of Health if they had been paid for at current rates. The standard adopted was the minimum fee bill of the New York State Working Men's Compensation Board for a part of New York City. Parenthetically, it may be said that insurance companies often complain that the Florida prices are higher than New York prices.

To make a long story short, it turns out that if all the laboratory procedures performed in 1935 by the various branches of the Bureau of Laboratories of the State Board of Health of Florida had been paid

BUREAU OF LABORATORIES

for at standard rates they would have cost well over \$800,000. As against this, the total expenditure allowed in the budget for 1935 was less than \$42,000. For every dollar spent by the laboratories \$20.00 in value of work done was enjoyed by the inhabitants of the state.

Inasmuch as we have every reason to believe that the other departments of the Board of Health were equally efficient and profitable, we may multiply the total expenditures of the Board in 1935 by twenty, getting a total of \$4,500,000 for the total value to the state of the Board of Health.

Of course, it is true that much of this work would never have been done if it had not been done gratis by the state but the results of this kind of work, like the blessing of liberty, are enjoyed by the whole population. It is gratifying to know that so far as the state is concerned we are not unprofitable servants.

SUMMARY OF WORK DONE IN THE LABORATORIES OF
THE STATE BOARD OF HEALTH DURING THE
MONTH OF NOVEMBER, 1936

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	3920	520	423	135	152	5150
Diphtheria	754	409	91	526	223	2003
Typhoid	867	175	94	62	19	1217
Malaria	860	188	125	24	191	1388
Rabies	17	3	-----	3	-----	23
Tuberculosis	281	85	37	37	9	449
Gonorrhea	1055	330	174	287	78	1924
Kahn	5657	2852	450	3317	345	12621
Water	-----	49	14	188	-----	251
Milk	267	337	132	310	87	1133
Miscellaneous	723	45	174	335	34	1311
	14401	4993	1714	5224	1138	27470

Specimen containers distributed.....12318

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	110 Packages
	5,000 units	58 Packages
Schick		3510 Tests
Toxoid		2550 C. C.
Typhoid Bacterin		1306 Treatments
Vaccine Virus		1661 Capillaries
Antirabic Virus		61 Treatments

COUNTY HEALTH WORK

A. B. McCreary, M.D., Director

START THE NEW YEAR WITHOUT A SCRATCH

The child in school is apparently heir to almost all kinds of skin disorders from abrasions to "itch," but scabies or itch is by far the commonest of all skin ailments during this period of life.

Scabies is a contagious parasitic disease of the skin, marked by burrows and a multiform eruption accompanied by severe itching. It is caused by the little itch mite which bears the very dignified scientific appellation of *Acarus* or *Sarcoptes scabiei*. The incubation period is brief. It is only a few hours after contact with a case that the unfortunate individual becomes aware of the aggravating symptoms which are usually intense itching between the fingers, on the wrist and forearm (flexor surfaces). If not checked this will rapidly spread to the chest and the rest of the body, and incidentally to the rest of the family and to the school.

The itch mite burrows under the skin and produces a small vesicle or papule at the site of entry with a linear epidermal elevation marking the course of the burrow. The burrow is characteristic of scabies. Vesicles, papules, pustules and crusts due to scratching are common in untreated cases. Itching is a constant and intensely annoying symptom, sometimes so marked at night as to render sleep impossible.

It is spread by contact with cases or by linen or clothing soiled by cases.

It is controlled by treatment of the cases and by exclusion of infected persons from school. Itch is easily cured. The well known sulphur and lard combination gives most excellent results when applied twice per day for three or four days and then followed by a thorough bath and a complete change of clothing and bed linens. In order to be rid of the malady it is frequently necessary for the whole family to take treatment. Many individuals have cured themselves only to be reinfected by the "nits" from their own soiled clothing.

There is no stigma nor disgrace attached to having the "itch." Anyone may have it. The writer has contracted it some two dozen or more times as a student and later as a school physician, simply from examining school children. The disgrace comes from keeping it! Anyone can be rid of the itch in four days.

Another obstacle to the control of the disease is the high-strung parent who wants to whip everyone from the school superintendent

COUNTY HEALTH WORK

to the janitor (including the doctor) because "little precious" was sent home with the itch. Why anyone should get the idea that their social standing is a protection against "itch" is beyond the more practical-minded. When your child is sent home with the itch, it is done so that the child may have the advantage of early treatment for the child's own sake as well as the protection of the public. And bear in mind that it is no disgrace to have the itch but a distinct disgrace to keep it.

Go to your physician and follow his instructions.

BUREAU OF TUBERCULOSIS

A. J. Logie, M.D., Director

TUBERCULOSIS AND THE NEGRO

An important problem must be solved and a serious menace must be removed. The incidence of tuberculosis among the negroes is considerably higher than that among the whites. Since, in the South, the negro is used as a domestic servant, nurse maid, laundress, etc., it is readily seen that they must be protected, if we expect to protect ourselves. The death rate (tuberculosis) for the negro in Florida is more than three times the death rate for whites. For the United States as a whole the ratio is about the same. The consumptive negro creates a very serious problem in Florida because of the fact that members of his race constitute practically the sole source of domestic labor, and because tuberculosis is such a common disease among them.

The negro race, as a whole, is practically ignorant of the facts of tuberculosis, even to the extent that many of them believe that the disease is the result of a "curse" or "evil spell" cast upon them by some malicious person. This belief often causes many of them to depend upon the curative ministrations of "root doctors," who are as a rule just as superstitious as the patient, and who prescribe fantastic as well as hopeless "cures."

The negro with tuberculosis is an extreme menace not only to his immediate neighbors, but just as well to those who employ him. He or she is most likely of all to spread the disease, due to the intimate contact with the members of the household, adults and especially children, that such employment incurs.

The insanitary living conditions, overcrowding of dwelling places, impoverished status, ignorance and superstition, and a racial lack of resistance to progressive tuberculous infection are the features which

BUREAU OF TUBERCULOSIS

raise the negro tuberculosis mortality and morbidity to such precipitous heights. This problem can be met by unremitting efforts to afford proper treatment facilities for the tuberculous negro, and by intense activity in an endeavor to remove the obstacles to their healthy living, chiefly through education and better economic standards.

The negro who cooks your food; cares for your children; launders your clothes; cleans your house; or drives your car, must be free of the disease. If he suffers from or develops tuberculosis he makes you a contact; that is, a person exposed to a case of tuberculosis. The great possibility of your developing the disease under such circumstances cannot be ignored. This menace can be overcome if all of us insist upon periodic medical examinations of our colored employees. No negro should be employed in the home without having been carefully examined by a competent physician. The examination should include an X-ray of the chest. If a domestic develops the slightest symptom that is suggestive of tuberculosis, he or she should be kept under close medical supervision until the situation is completely cleared.

Indeed, the problem of tuberculosis in the negro is a decided menace to the white people of Florida.

BUREAU OF SANITATION

T. S. Kennedy, M.D., Director

DUTIES OF THE COUNTY SANITARY OFFICER*

The subject assigned me by the program committee, "Duties of the County Sanitary Officer," is considered one of the most important subjects in public health work.

A definition of sanitation is timely. According to Ehlers and Steel, in *Municipal and Rural Sanitation*, it is "the prevention of disease by eliminating or controlling the environmental factors which may form links in the chain of transmission. These environmental factors include milk, food and water supplies, wastes, insect carriers, housing, drainage, and many others."

One of the first duties of the county sanitary officer is to recognize and respect the county health officer. This is ordinary professional ethics; but at the same time the United States Public Health Service, the State Board of Health and the citizens of the county all hold the county health officer—not the sanitary officer—responsible for the

*Read before the Eighth annual meeting of the Florida Public Health Association, Inc., Tampa, December 7-9, 1936.

BUREAU OF SANITATION

health and sanitary conditions of the county. He is in charge of the County Health Unit. His orders should be given first consideration. He should be consulted on all matters pertaining to sanitation. A complete report covering the activities of the sanitary officer should be presented to him daily. Plans for the next day's work should be discussed with him to enable him to keep in close touch with the sanitary problems of his county. Full cooperation is necessary to perfect a model health unit.

The field duties of the county sanitary officer could be divided into two classes, first to *prevent* and second to *correct* insanitary conditions. Let us consider first prevention measures.

In municipalities that do not have a city sanitary officer, the county sanitary officer may render assistance to the city councils in drafting ordinances for control of sanitation. It is also his responsibility to assist the municipalities in safeguarding the water supply by preventing pollution of the watersheds outside of city limits. (Drainage wells are under the control of the district sanitary officer.)

The county sanitary officer may and should assist the county school superintendent in providing sanitary facilities, potable drinking water and proper drinking fountains or individual cups for pupils and teachers. He should assist the dairymen in designing the kind of plant that can be easily kept in sanitary condition, including sanitary toilets and a water supply free from pollution.

An intensive non-stop program of education should be entered into with the Parent-Teacher Associations, Women's Clubs, Home Demonstration Clubs through the county home demonstration agents, and any other agency or service contacting the rural homes and the people in the small unincorporated towns. Rural people in general should be educated to the necessity of providing sanitary toilets and water free from pollution. They should be shown how to properly curb the well; how to build pens for compost heaps that will save the manure and at the same time prevent fly breeding; how to screen the home and to eliminate mosquito breeding places, such as barrels and other water containers.

Sanitation in incorporated towns can and should be handled by ordinances and through the city sanitary officer. The county sanitary officer's place in this situation is to assist and cooperate with him upon request.

(To be continued)

FLORIDA PUBLIC HEALTH MEETING

The Eighth Annual Meeting of the Florida Public Health Association, Inc., was held in Tampa, December 7, 8 and 9, 1936. The program was exceedingly good and the attendance quite above the average. The Tampa members arranged entertainment which delighted the members and guests. The Tampa meeting will long be remembered as one of the best meetings held by the Association.

Dr. W. A. McPhaul, the State Health Officer, was elected president to succeed Dr. T. H. D. Griffiths. Mr. S. D. Macready was elected first vice-president, Dr. L. J. Graves, second vice-president and Dr. Stewart Thompson, re-elected secretary-treasurer. In addition to the above named officers, the following were elected as Board Members: Miss Vandilla Strickland, Mr. John R. Hoy, Dr. W. H. Pickett, Dr. T. S. Kennedy, Dr. W. E. Van Landingham and Dr. T. H. D. Griffiths.

The secretary of the Association was selected as the representative to the Governing Council of the American Public Health Association. Fifty-one names were added to the official membership roster. Of this number, forty-five were new members and six were former members reinstated.

By special request, a few of the papers read before the annual meeting were typed and mailed out. Papers, or papers in part, have been published in Health Notes. Since the space in Health Notes is so limited and so many worthwhile papers not published have been requested, it is planned to publish the proceedings and all papers and discussions in mimeographed form at as early a date as possible. When this publication of the proceedings is ready for distribution, a copy will be mailed to every member of the Association. Copies will be mailed to non-members upon request insofar as the supply will permit.

REPORT OF SECRETARY-TREASURER

Stewart G. Thompson, D.P.H.

To the President and Members of the Florida Public Health Association, Inc., in Session at Tampa, Florida:

At the Seventh Annual Meeting of the Association held in Orlando last year, there was a total of 202 registered. Of this number, 105 were members of the Association and 97 were visitors and guests. The attendance at the Tuesday night banquet numbered 126. The proceedings and a corrected printed program of last year's annual meeting, together with the minutes of meetings of the Board of Directors and regular committees form a part of this report.

REPORT OF SECRETARY-TREASURER

Committee Appointments

President Griffiths' committee appointments were as follows:

Auditing Committee

G. W. Baltzell, Chairman
M. J. Mackler
Wilburn Lassiter

Membership Committee

Stewart G. Thompson, Chairman
W. V. King
Mrs. Elizabeth Bohnenberger

Nominating Committee

Homer Venters, Chairman
Ford Thompson
Mrs. May McCormick Pyncheon
G. H. Bradley
H. D. Peters

Committee on Local Entertainment

M. J. Mackler, Chairman
Mrs. Mary Louise Menendez
J. R. McEachern
Russell Broughman

Committee to Arrange For Broadcasts

C. D. Hopkins, Chairman
M. J. Mackler
Fred H. Stutz

Committee on Projecting Lantern

Fred A. Safay, Chairman
W. Y. Randle

Committee on Exhibits

Mrs. Elizabeth Bohnenberger, Chairman
Julia O. Graves
Mrs. Gladys Smith
C. W. Pease
Mark F. Boyd

Committee on Entertainment of Lady Guests

Mrs. Russell Broughman, Chairman
Mrs. J. R. McEachern
Mrs. Amos Norris
Mrs. M. J. Mackler
Mrs. H. M. Cook

Committee on APHA Membership

Mrs. Vida Lester MacDonell, Chairman
S. D. Macready
Ruth E. Mettinger

Golf Committee

R. G. Nelson, Chairman
H. D. Venters

President's Advisory Committee

Mark F. Boyd, Chairman
N. A. Upchurch
George N. MacDonell
Paul Eaton
Stewart G. Thompson
W. V. King
H. N. Parker

Committee on Registration

Stewart G. Thompson, Chairman
Elsie Hyatt
Anna C. Emmons

Membership

Thirty-two (32) new members have been added to our roster during the year:

Elizabeth Anderson, West Palm Beach
Captain H. J. Banton, Ocala
Mrs. Nina Branch, Pensacola
W. R. Carroll, Ph.D., Gainesville
F. V. Chappell, M.D., Jacksonville
Mrs. Myrtle Conquist, West Palm Beach
Charlotte Conrad, Miami
Mary L. Crosby, West Palm Beach
Mary Hanley, Tampa
Leon E. Johns, Ft. Lauderdale

Ella Belle Jones, Crawfordville
Walter Junkins, Coral Gables
Ethel H. Loomis, Monticello
Jewell McDaniel, West Palm Beach
Clio McLaughlin, Jacksonville
T. E. McNeel, Orlando
Mrs. Mary Louise Menendez, Tampa
Mrs. Edith Merrill, Atlanta, Ga.
Mrs. Anna O'Brien, Mascotte
J. C. Patterson, M.D., Sarasota

REPORT OF SECRETARY-TREASURER

Elizabeth Perkins, Tallahassee
 John Phair, Jr., M.D., Jacksonville
 Wm. H. Pickett, M.D., Pensacola
 Paul G. Shell, M.D., Ft. Lauderdale
 Susie Spencer, Jacksonville
 C. Strickland, St. Petersburg

Mrs. Olivia J. Todd, Orlando
 M. Lawrence Turner, M.D., St. Petersburg
 Dorothy Walton, Jacksonville
 Hattie Ware, Bartow
 Anna Grace Whipple, Pensacola
 E. Bryant Woods, M.D., Jacksonville

Five (5) former members have been reinstated:

Mary Louise Frazee, Jacksonville
 Jessie Love, West Palm Beach
 Mrs. George N. MacDonell, Miami

Mrs. Allie D. Mays, Jacksonville
 W. E. Van Landingham, West Palm Beach

The total membership of our Association is now 168. Of this number, 83 are classified as active members and 85 as associate members. Forty-three (43) of our active members are also members of the American Public Health Association. According to the rule, at least one-half of our active members are required to be members of the A.P.H.A. and our membership, therefore, is in good standing at the present time. A complete roster for every classification of our membership is on file with the secretary and is part of the official records of the Association.

Finances

On November 12, 1936, there was \$277.53 to be accounted for. Disbursements total \$186.19, leaving a balance in the bank of \$91.34, as of November 12, 1936. A detailed financial statement is attached, outlining item by item receipts and disbursements.

The books of the treasurer have been examined by the auditing committee and a certification as to the accuracy of the accounts accompanies the financial statements.

December 9, 1936.

Dr. Stewart G. Thompson
 Secretary-Treasurer
 Florida Public Health Association, Inc.
 Jacksonville, Florida.

Dear Sir:

This is to certify that we have examined the attached statements of cash receipts and cash disbursements for the period from November 14, 1935, through November 12, 1936. These statements which have been prepared by you, as treasurer, correctly reflect the total amounts received and disbursed as shown by the books.

Cash on hand as of November 12, 1936, was verified by bank statement.

Yours very truly

Auditing Committee

(Signed) G. Wilson Baltzell, Chairman
 M. J. Mackler
 Wilburn Lassiter, M.D.

REPORT OF SECRETARY-TREASURER

Cash Statement

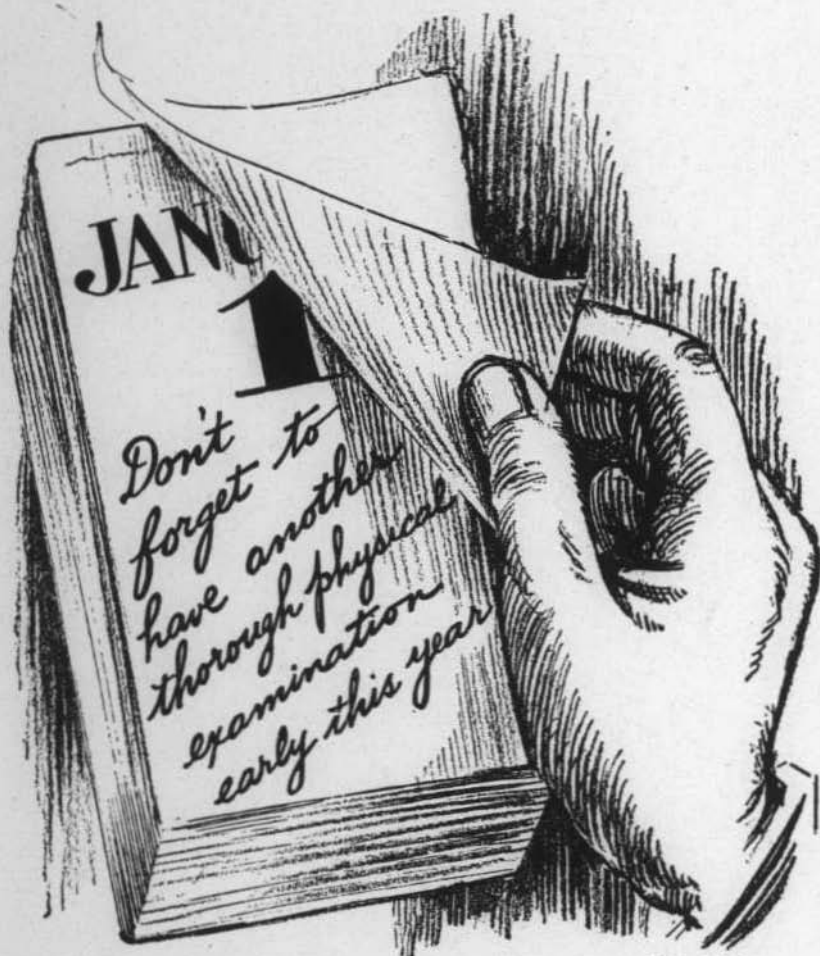
November 14, 1935—November 12, 1936

Receipts

Cash in Bank, November 14, 1935		\$152.03
Dues Collected for 1935	\$16.00	
Dues Collected for 1936	73.00	
Dues Collected from Guest not Eligible for Membership	1.00	90.00
		<hr/>
Rebate from American Public Health Association, 1935 dues \$1.00 each for 35 members and 50c dues for latter half of 1935 for one member		35.50
		<hr/>
Total Cash to be Accounted for		\$277.53

Disbursements

Annual Dues of Florida Public Health Association, Inc., to American Public Health Association, 1935	\$10.00	
Banquet Expense		
Orchestra	\$25.00	
5 Guest Banquet Tickets, 4 telegrams, 1 'phone call	8.36	
Toastmaster; hotel room, etc.	12.25	45.61
		<hr/>
Convention Expense		
Wiring for Broadcasting	22.65	
Halftone portraits and mats for guests	29.94	
3 mats, telegram, incidental expense, Orlando meeting	5.77	58.36
		<hr/>
Refund of registration fee to guest not eligible for membership	1.00	
Supplies	69.00	
Telephone and Telegraph	2.22	\$186.19
		<hr/>
Balance in Bank, November 12, 1936		\$ 91.34
Check No. 114 Outstanding		2.22
		<hr/>
Certified Balance at Bank		\$ 93.56



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HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

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Vol. 29

FEBRUARY, 1937

No. 2

Edited by
STEWART G. THOMPSON, D.P.H.

ARTICLES

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DUTIES OF COUNTY SANITARY OFFICER—*Kennedy*

DEATHS FROM SYPHILIS, BY COUNTIES, 1935—*Thompson*

W. A. McPHAUL, M.D., STATE HEALTH OFFICER
Jacksonville, Florida

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W. A. McPhaul, M.D.

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CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph.D. (U. S. Bureau Entomology)
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ADMINISTRATION

W. A. McPhaul, M.D., State Health Officer

"ARE WE A NATION OF PRUDES?"

The following editorial appeared in the Collier's Magazine issue of February 6, 1937, under the above caption:

"Today we talk frankly enough about many intimate personal problems which would have shocked our grandparents. Although we are a sophisticated people, when it comes to a question like syphilis, we are still a nation of prudes.

"If the whole truth were known, syphilis would appear as our greatest hazard to life and health. No less an authority than the great physician, Sir William Osler, once said that it was the first of our killing diseases. Although nobody really knows the total havoc it works, most reliable figures indicate that fully 100,000 American deaths can be traced annually to this source. At a minimum, over a half million new cases occur every year and over six million persons in our population suffer from its ravages. It is often masked under other diseases. It is primarily responsible for a sizable proportion of cases of blindness and insanity and diseases of the heart, bones and other tissues. It causes three times as much destruction of life and limb as does the automobile, twice as much as tuberculosis and one hundred times as much as infantile paralysis.

"The most encouraging factor in the situation is that medical knowledge is available to stamp out this disease just as effectively as we have already controlled typhoid fever, yellow fever and smallpox. We know the behavior of the germ that causes syphilis and how infection is spread from person to person. We also have a perfect blood test for diagnosing it and an almost infallible drug for treating it.

"Why is it then that scientific treatment is not utilized by everyone who is so unfortunate as to contract this disease? Only about one in every ten victims is now receiving proper medical attention. Many who should be under treatment are quite ignorant that they are infected; others who do know are ashamed to admit it, and, therefore, receive care usually from quacks. This is the direct result of the widespread belief that *nice* people do not talk about syphilis, that *nice* people do not have it and that *nice* people should not have anything to do with those who do have syphilis. There exists the foolish notion that the disease is a mark of 'guilt' and, therefore, that the victims deserve what they get. The sanctimonious still say: 'The wages of sin is death.'

"This destructive attitude is all the more uncharitable because it is so utterly false. Not every sufferer from syphilis is guilty of anything except misfortune. In some cases the infection results from using a freshly contaminated object or in other entirely innocent ways. Many babies are born with this disease, having been infected by their mothers. The infection percolates from one stratum of the population to another, respecting no class boundaries. The result is that syphilis is rampant and is in-

ADMINISTRATION

volving us in enormous social losses. We are actually paying more for the care of neglected cases, for the blind, for the crippled and for inmates in our mental institutions than it would cost to make the disease as rare as typhoid.

"The best American authorities are agreed on a program, the value of which has been convincingly demonstrated in England and the Scandinavian countries. Norway, Sweden and Denmark, with a total population of about twelve and a half million people, report less than 1,600 cases of syphilis each year. This remarkable result has been achieved because after many years' education the people have been taught to understand the nature of the disease and the necessity for thorough treatment.

"What England and Sweden have accomplished is possible for us also. It will be necessary, however, that we approach the question from the scientific rather than from the moral point of view. Nothing is more ostrich-like than our present policy of silence. Only a few months ago one of the national broadcasting companies refused to permit a leading health authority to give a scheduled address because he mentioned in it the subject of venereal diseases. Only during the last few years have the newspapers of the country begun to speak of these conditions. Fortunately such attitudes are rapidly becoming relics of the past, as is witnessed by the fact that this editorial appears in this magazine. Collier's is definitely opposed to censorship and favors frank and full discussion of this problem.

"A national campaign to stamp out syphilis is being launched by our public health and social agencies. Federal, state and local officials are uniting with the medical profession, nurses, social workers, civic organizations, the press and the general public to demand an aggressive campaign adapted to the needs of each community. Fortunately, the Social Security Act has made money available to supplement state and local funds for the promotion of community health work and these appropriations can be used to eradicate syphilis. Now no state or city has the excuse that it cannot carry on this work because of lack of funds. The money can be secured if the local authorities will apply for it.

"It is high time that all decent people rallied to the support of this campaign. We must now speak out in plain, unambiguous terms and strive to educate our people in ways and means of avoiding infection and of stamping out such infections as exist. We must make readily available facilities for treatment. Our clinics and dispensaries must have evening hours so that those who work during the day may come conveniently for treatment. Above all, we must give all pregnant women who are infected the treatment that will absolutely prevent them from transmitting the disease to their unborn children. Above all, we must speak out, teach and broadcast throughout the land the knowledge which we have to prevent the injury of countless people from a disease which modern science can control."

ADMINISTRATION

Though this expresses no new idea as far as the professions of medicine and public health are concerned, it evidently expresses an entirely new and distinctly gratifying attitude on the part of the lay publishers. We indeed wish to congratulate Collier's upon their stand in this very important matter.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF DECEMBER, 1936

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites...	2459	534	192	167	99	3451
Diphtheria	779	380	79	710	98	2046
Typhoid	758	154	35	120	12	1079
Malaria	838	169	56	39	106	1208
Rabies	17	5	2	...	..	24
Tuberculosis	282	189	16	48	3	538
Gonorrhea	1102	412	189	381	76	2160
Kahn	5713	2780	294	5347	237	14371
Water .....	...	37	2	187	...	226
Milk	238	301	62	261	...	862
Miscellaneous	752	11	101	471	18	1353
	<u>12938</u>	<u>4972</u>	<u>1028</u>	<u>7731</u>	<u>649</u>	<u>27318</u>
Specimen containers distributed.....						8803

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	34 Packages
	5,000 units	7 Packages
Schick.....	1870	Tests
Toxoid.....	935	C. C.
Typhoid Bacterin.....	1264	Treatments
Vaccine Virus.....	930	Capillaries
Antirabic Virus.....	48	Treatments

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD
BE DIRECTED TO THE STATE LABORATORY, STATE
BOARD OF HEALTH, JACKSONVILLE, FLORIDA

COUNTY HEALTH WORK

A. B. McCreary, M.D., Director

HOOKWORM DISEASE

Definition: Hookworm disease is an infectious disease characterized by marked anemia and asthenia.

Etiology: A small, thread-like worm known as *Necator americanus* (American Killer) common in the United States; *Uncinaria duodenale*, and *Ankylostoma duodenale*.

Incubation: Varying from three to six weeks dependent upon degree of infestation.

Diagnosis: History, symptomatology, laboratory. Usually the earliest symptom is the "ground itch," an itching and burning sensation most frequently encountered between the toes, the portal of entry for the larvae.

After a period of four or five weeks a listlessness is noted which gradually develops into marked anemia and weakness. The patient assumes a pasty white color, and a fish-like glaze in the eyes. There is dizziness, gastric pain and retardation of growth. A history of eating soil and chalk is frequently given. (The school child will frequently stand at the blackboard and eat chalk, and not infrequently the sufferer will eat clay.) There are hemic heart murmurs and difficult respiration.

The symptom syndrome varies according to the degree of infestation. Eggs are found in the stools in about five weeks following skin penetration by the larvae.

Transmission: Contact with cases and carriers. Carelessness and lack of cleanliness are contributory factors. Soil pollution and bare feet create the greatest hazard, although the disease may be contracted directly by the mouth. Every case is a carrier and every carrier is a case.

Control:

1. Education! An extensive and intensive program of health education, outlining to the public the cause, the manner of spread and the methods of control. Instruction in cleanliness, personal hygiene, and sanitation. Every possible channel should be utilized in bringing the subject before the public.

2. Report of cases and investigation of persons and families infected. Survey of sanitary conditions of environment. This is rendered much less difficult following the educational program.

3. The sanitation of the environment. The correction of soil pollution by proper sewage disposal. The construction and maintenance of sanitary privies in rural areas. Education makes the promotion of this program much simpler.

COUNTY HEALTH WORK

4. Intensive treatment of hookworm patients.

The treatment of the patient is of little or no value as a public health measure unless the public has been educated regarding the value of control methods, and their cooperation enlisted. The patient treated without correction of the environment will soon become reinfected.

Summary:

- | | |
|----------------|-----------------|
| (1) Education. | (3) Sanitation. |
| (2) Reporting. | (4) Treatment. |

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

CLEANLINESS

If, in the rearing of children, more emphasis were laid on the rules of hygiene from the time of the expectancy of the child, we should have more worthwhile citizens and better communities.

Cleanliness doesn't merely consist of taking a bath and putting on clean clothes. It goes much further than this. It includes bathing frequently, in keeping clothes clean and in order, in seeing that the teeth are attended to, that hair and nails are kept clean, that shoes are polished and not run down at the heels, that house and premises are sanitary, that the place in which the food is prepared is immaculate, and it means clean thoughts, words and play.

If parents could realize the importance of expressing themselves with nicely chosen words in order that the children might imbibe these rather than swearing and careless speaking, which they so often hear, much good would result, as children are mouthpieces of the grown-ups.

Children should be taught that it does not require wealth to be clean. The plainest of clothes, if clean and worn well, are far preferable to the most extravagant ones, dirty and carelessly worn.

Our prisons would not be so full of young people today had they been taught in infancy the importance of cleanliness. If such had been the case, their minds would have been trained in the right direction, they would have sought good company, wholesome play and recreation and acquired a desire to be self-respecting citizens.

Habits may be taught children a few weeks after birth; however, as the child advances in years it is necessary to teach him why one should observe these habits, to impress upon him that his future, mental and physical, will depend largely upon them. In order to do this, interest must be aroused both at home and in school, as the child's time is divided

BUREAU OF PUBLIC HEALTH NURSING

between the two places and cleanliness becomes a community problem, requiring a full-time program.

There are a number of ways in which this can be gotten over to the child. For instance, in the home an understanding and desire for clean, neat, sanitary and attractive surroundings may easily be developed. In school, health habits, teaching hand washing and explaining why this should be done always before eating and after handling books, pencils and other classroom articles. In reading books on cleanliness; in speaking good language; in writing, neat papers and clean words. All the above tend to direct the mind in the proper channel.

The child should be taught, also, that mouth cleanliness is conducive to good health inasmuch as clean teeth mean good teeth if the proper food was taken by the mother before the baby was born. The child should learn that clean hands and clean food in sanitary surroundings make for a better digestion, which means freedom from intestinal disturbances; that wholesome thoughts prompt healthful recreation, and in the final analysis the word stands for *self-respect*, good citizenship and a high *morale and happiness*, and that carelessness empties one's purse, steals his efficiency, robs the family of support and leaves one crippled and beaten.

BUREAU OF SANITATION

T. S. Kennedy, M.D., Director

DUTIES OF THE COUNTY SANITARY OFFICER—(*Continued*)

Preceding installment in January issue

In advocating corrective measures, courtesy, consideration and a great deal of tact are required if reforms are to be accomplished and antagonisms avoided. When a county sanitary officer is called, or a complaint is made by letter, the complaint should be acknowledged by return mail, and then cared for at the earliest possible moment. Many complaints come in that are of little consequence but to the party making the complaint, they may seem of the greatest importance. The sanitary officer cannot afford to disregard them.

Some calls and complaints require the greatest possible diplomacy in handling them. Take for instance, complaint regarding an open-back, surface privy. The owner may not be aware that such a privy is a menace to health. He probably does not know how typhoid and other intestinal diseases are transmitted, nor that flies breed in filth. The sanitary officer should explain these dangers to him, to his family and to his neighbors. The same is true regarding hog pens, barns and dairies.

Leave the "big stick" at home. People do not like to be told they *have* to do a thing. It is much easier to lead them than to drive.

BUREAU OF SANITATION

Patience and tact on the part of the officer will do more to produce the desired result than will a dictatorial, military manner.

The sanitary officer's ability to handle people is often severely taxed when complaints come in indicating friction between neighbors over chickens, pigs, cow lots and similar things. In every instance they should be investigated and if not worthy of action, the sanitary officer must find himself able to convince them that the matter is not one over which he has jurisdiction.

The same rule applies to city politics. The county sanitary officer may be called on to condemn some insanitary condition which exists on the premises of a local political figure. The job would be a more or less embarrassing one to the city sanitary officer so he calls the county man in. The county sanitary officer should never become involved in such a situation. If there exists a real menace to the health of the community, and the city sanitary officer refuses to handle it, report should be made to county health officer who will notify the State Board of Health and the matter will be handled through that body.

It is the duty of the county sanitary officer to inspect the school sanitation and water supply in the rural districts. This should be done as frequently as possible. A report should be sent to the county school superintendent after each inspection, stating the conditions found, be they good or bad, and recommending necessary changes if any are needed.

Swimming pools, tourist and trailer camps are given their initial inspection by the district sanitary officer, of the State Board of Health. This inspection should be made with the county officer if convenient. All subsequent inspections should be made by the county officer, and at frequent intervals. (In this connection, let me say that water for interstate carriers, shell fish and state institutions are handled by the State Board of Health.)

The county sanitary officer should give some time to butcher pens. A number of complaints have come into the state office regarding the insanitary method of handling meat. An abattoir properly built and supervised, with an ordinance requiring all meat offered for sale to be inspected, would insure the consumer a sanitary product. The sanitary officer should encourage such building and meanwhile give such attention as he can to butchering places.

Garbage disposal is one of the big problems of the county sanitary officer. Incineration is, of course, the ideal method, but not always possible as incinerators are somewhat expensive. The officer should recommend the next best method which is to bury. If a dump has to be used, recommendations should be made for it to be located far

BUREAU OF SANITATION

enough from dwellings not to be a nuisance, and to be burned often to keep down odors and fly breeding.

The county sanitary officer should by all means give the greatest possible attention to privy building. With a hookworm survey showing 85% positive in certain sections, it will take some time to complete a program. A strong educational program is imperative. For instance a survey was recently made in a northwest Florida town. Out of 417 children examined, 219 were found positive. When a check was made on the homes, it was found that all the positives, except two, were from the unsewered district. Bearing in mind the disastrous results for the child and the ease with which they may be eliminated, the sanitary officer should by all means keep a privy-building program on the calendar.

It seems appropriate to issue a word of warning at this point. The county sanitary officer should not get over enthusiastic and attempt to design a sewage disposal or water plant for some municipality or institution. That is the job for an engineer.

In conclusion, let me set a standard for an efficient county sanitary officer. He is one, who by friendliness and tact in the performance of his duties, builds good will and high regard for public health service; who knows and practices professional ethics toward inferior and superior officers in his own service as well as other educational agencies; who constantly looks to his own immediate job of "eliminating or controlling the environmental factors" for transmitting disease through "milk, food and water supplies, wastes, insect carriers, drainage and many others;" who feels a responsibility to report to the county health officer any condition, whether or not it is within his own province, which might affect the health of the citizens of the county in which he works.

There is an outstanding need for sanitation in the State of Florida. The sanitarians have a big job. They are qualified to do it well. "The Lights are Green"! Let's Go!

WATER AND SEWAGE WORKS MEETING AT CAMP ROOSEVELT

MARCH 29-APRIL 1

A Short Course School for those concerned with the operation of water and sewage works, and the Annual Meeting of the Florida Section of the American Water Works Association will be held this year at Camp Roosevelt near Ocala, March 29-30-31 and April 1. Funds have been

BUREAU OF SANITATION

made available so as to have several men nationally known in this line of work as instructors.

The School is sponsored by the Water Works Association, University of Florida, and State Board of Health. It is urged that all State and local health departments not only be represented, but make every effort to see that municipalities are advised of the importance of sending those entrusted with their water and sewage treatment works to this School.

BUREAU OF TUBERCULOSIS

A. J. Logie, M.D., Director

PULMONARY TUBERCULOSIS

The germ of tuberculosis is the causative agent in the production of the disease; without its presence there can be no tuberculosis. The germ of tuberculosis reaches one individual from another individual, chiefly through the medium of the infected droplets which are disseminated from the mouth during a coughing spell, and even during the ordinary speech of a person suffering with tuberculosis. Tuberculosis is not inherited; the germ rarely, if ever, invades the child before birth. However, after birth the intimate contact of the infant with the tuberculous mother affords ample opportunity for infection.

When the germ gets into the body of an individual for the first time, whether it be a child or adult, we have what is called the childhood type of tuberculosis. This is a misnomer, as it implies that it is essentially an infection of childhood. The term now used instead is "primary infection." This confusion arose through the fact that formerly it was believed that only children showed this type of tuberculosis. However, it is definitely established at present that regardless of whether it be child or adult, infection with the tuberculosis germ for the first time in any individual will produce this primary infection.

The childhood type of tuberculosis, to which we shall now refer as the primary infection, is an infection which does not, as a rule, show any symptoms or produce any disastrous effects. The natural resistance of the body is usually powerful enough to control and limit the infection with no obvious signs of any change in the body. The only evidence of any such occurrence is the fact that the tuberculin skin test has become positive in reaction, and an x-ray of the chest will show a change typical of the primary invasion at some future date. Nearly all adults, probably 90%, will show a positive tuberculin skin test and x-ray evidence of the primary infection, which means that at some time in their lives they have been exposed to the infection, probably without their knowledge.

The incidence of the primary type of infection increases in direct proportion to age. A positive reaction to the tuberculin test in a child is

BUREAU OF TUBERCULOSIS

more significant than in an adult; the younger the child the greater the significance. A young child has little chance of being infected by any but his immediate family, with which he has intimate contact, and of course the significance lies in the fact that unless that contact is removed the primary infection may go on to the destructive type of tuberculosis. Any individual showing the primary type of infection should be observed regularly at yearly intervals to insure diagnosis at an early stage if the destructive type of tuberculosis should become superimposed. This type of tuberculosis is not dangerous in itself, nor communicable, and the child in most instances may attend school, but he should be under medical observation.

Another type of tuberculosis is the destructive type, with which we are chiefly concerned. It is known as the adult type of tuberculosis, but here again, this type may occur in either child or adult. This infection is the type that will occur in any individual if he has had previously the primary infection and has since been exposed to a massive or continuous infection from a tuberculous person who is eliminating the germ of tuberculosis in profusion (open case). Only those persons with the adult type of tuberculosis will cough up the germ, and consequently they are the ones who are dangerous to the family and community, and, of course, to themselves.

The average person must appreciate that tuberculosis is preventable; that it is not inherited directly; that it is acquired by direct transmission of the tubercle germ from the sick to the healthy; above all, he must be concerned immediately if possible symptoms develop in the nature of loss of weight, a continuous tired feeling, a persistent cough, indigestion, pain in the chest, or the spitting of blood.

BUREAU OF DENTAL HEALTH

E. C. Geiger, D.D.S., Director

YOUR CHILD'S TEETH

One of the most important influences in the progress of the human race has been the willingness with which parents have sacrificed for the advancement of their children. From the moment of birth, on through years of physical and mental growth and development, there is constantly present the desire, ambition, planning and sacrificing of the parent for the child.

Mouth cleanliness, proper diet and dental attention are preventions of tooth decay-disease. Toothache, one of the most painful and prevalent afflictions of modern civilization is a disease; a disease that can be pre-

BUREAU OF DENTAL HEALTH

vented. Decay of teeth is essentially a disease of childhood and early youth. It is not communicable, but mainly an individual consideration. Teeth begin to form before birth. This process of tooth formation continues until the temporary or baby teeth have been replaced by the permanent teeth.

No greater developmental change takes place in the entire body than in the jaw. At one time in the period of tooth development there are present in the jaws fifty-two teeth; twenty temporary teeth (which are later shed), and thirty-two permanent teeth.

One of the most important factors of childhood is growth. The human jaws begin development the same as other parts of the body. It must be obvious that the small jaws of little ones are neither strong enough to perform the masticatory functions of an adult, nor substantial enough to carry teeth large enough to perform such functions. The temporary teeth then are smaller than the permanent teeth and there are fewer of them, because the jaws are in turn proportionately smaller than adult jaws.

The child learns to masticate food with his temporary teeth, and so is trained to use his permanent teeth naturally. This is nature's training school and the premature loss of one of these teeth will upset the efficiency of the entire dental mechanism and retard the normal development of the face and jaws.

These teeth guide and train the tongue in its function of aiding in speech and handling food. They help the cheek and lip muscles maintain a definite relationship in facial appearance, and assist in strengthening the jaws and muscles of mastication.

They also definitely establish the relative shape and size of the dental arch (normal arrangement of the teeth), which they maintain as long as required by nature unless prematurely removed.

Good teeth are an important influencing factor in the appearance of a child. What is more inspiring than a happy, smiling child with a perfect row of clean, well shaped teeth, and conversely, what detracts more from the appearance of a happy, smiling child than poor, soiled, irregular, or missing teeth?

The average process of shedding and replacement of temporary teeth covers a period of seven years. Each temporary tooth is expected to remain in its respective position, maintaining a definite distance between the adjacent teeth on either side, so that the permanent tooth which is on its way can "come in straight." If a temporary tooth is prematurely lost the adjacent teeth drift into the space which it formerly occupied. This space is then too small for the accommodation of the permanent tooth and it is crowded out of the arch or is impacted.

BUREAU OF VITAL STATISTICS

Recorded and Resident Deaths from Syphilis, by Color, by Counties—
Florida, 1935

COUNTIES	RECORDED			RESIDENT		
	Total	White	Colored	Total	White	Colored
0. State	425	108	317	419	102	317
1. Alachua	3	0	3	4	0	4
2. Baker	0	0	0	1	0	1
3. Bay	1	1	0	1	1	0
4. Bradford	0	0	0	0	0	0
5. Brevard	6	0	6	6	0	6
6. Broward	3	0	3	4	0	4
7. Calhoun	1	1	0	1	1	0
55. Charlotte	4	2	2	4	2	2
8. Citrus	1	1	0	1	1	0
9. Clay	2	0	2	2	0	2
62. Collier	0	0	0	0	0	0
10. Columbia	8	2	6	5	1	4
11. Dade	65	14	51	60	10	50
12. DeSoto	0	0	0	0	0	0
56. Dixie	1	0	1	1	0	1
13. Duval	58	14	44	59	14	45
14. Escambia	18	5	13	18	5	13
53. Flagler	1	0	1	1	0	1
15. Franklin	1	1	0	1	1	0
16. Gadsden (Ex.)...	2	0	2	2	0	2
State Hospital ...	88	26	62	88	26	62
64. Gilchrist	0	0	0	0	0	0
57. Glades	1	1	0	1	1	0
65. Gulf	0	0	0	0	0	0
17. Hamilton	0	0	0	0	0	0
58. Hardee	0	0	0	0	0	0
63. Hendry	0	0	0	0	0	0
18. Hernando	1	0	1	1	0	1
59. Highlands	1	0	1	1	0	1
19. Hillsboro	40	17	23	39	16	23
20. Holmes	0	0	0	0	0	0
66. Indian River	0	0	0	0	0	0
21. Jackson	5	4	1	5	4	1
22. Jefferson	0	0	0	0	0	0

BUREAU OF VITAL STATISTICS

Recorded and Resident Deaths from Syphilis, by Color, by Counties—
Florida, 1935—(Continued)

COUNTIES		RECORDED			RESIDENT		
		Total	White	Colored	Total	White	Colored
23.	Lafayette	0	0	0	0	0	0
24.	Lake	5	1	4	5	1	4
25.	Lee	2	0	2	2	0	2
26.	Leon	6	1	5	5	1	4
27.	Levy	2	0	2	2	0	2
28.	Liberty	0	0	0	0	0	0
29.	Madison	2	0	2	2	0	2
30.	Manatee	4	2	2	4	2	2
31.	Marion	4	1	3	4	1	3
67.	Martin	1	0	1	1	0	1
32.	Monroe	0	0	0	1	1	0
33.	Nassau	3	1	2	3	1	2
34.	Okaloosa	0	0	0	0	0	0
54.	Okeechobee	0	0	0	0	0	0
35.	Orange	12	3	9	12	3	9
36.	Osceola	1	0	1	1	0	1
37.	Palm Beach	7	2	5	7	2	5
38.	Pasco	1	0	1	1	0	1
39.	Pinellas	9	3	6	8	2	6
40.	Polk	4	1	3	4	1	3
41.	Putnam	3	0	3	2	0	2
42.	St. Johns	3	1	2	3	1	2
43.	St. Lucie	3	0	3	3	0	3
44.	Santa Rosa	4	1	3	4	1	3
60.	Sarasota	2	0	2	2	0	2
45.	Seminole	5	0	5	5	0	5
46.	Sumter	0	0	0	0	0	0
47.	Suwannee	3	0	3	2	0	2
48.	Taylor	3	0	3	4	0	4
61.	Union	7	0	7	7	0	7
49.	Volusia	13	2	11	13	2	11
50.	Wakulla	0	0	0	1	0	1
51.	Walton	2	0	2	2	0	2
52.	Washington	3	0	3	3	0	3

A VEGETARIAN LOVE LETTER



Dearest Sweet Pea,

Do you carrot all for me?
My heart beats for you, with your
beautiful radish hair and your
turnip nose. You are the apple
of my eye. Give me a date, please!
If we cantaloupe, lettuce get
married anyway. I know we
would make a happy pear.

Your
Sweet Potato

HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

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JACKSONVILLE, FLORIDA

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STEWART G. THOMPSON, D.P.H.

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SHELLFISH AND PUBLIC HEALTH PROBLEMS*

L. M. FISHER, Sanitary Engineer
United States Public Health Service

Early History.

Shellfish have furnished an important source of food for primitive peoples living along the seacoast, as is evidenced by the large shell mounds which are still to be found along sections of the Atlantic Coast. Such shell mounds have been described by a number of writers who have investigated them from ethnological viewpoints and in some instances have found bones of human origin buried with the shells. At present no natural oyster beds are to be found on the Atlantic coast north of Cape Cod in the United States. The natural beds in this region have long since been depleted. Some oysters are grown in the Prince Edward Islands, where shell mines attest the fact that they have long thriven.

Occurrence.

Oysters are not found in the ocean but thrive best in estuaries, bays and coves which receive fresh water. The salinity of oyster growing areas is therefore less than the salinity of ocean water. The estuaries of large rivers accordingly furnish the best oyster growing areas, the principal reason being the food supply which is brought to the oyster beds by the fresh water streams. Thus the St. Lawrence River is responsible for the oyster beds at Prince Edward Islands, the Blackstone and other rivers for those in Narragansett Bay, the Connecticut and smaller streams for those in Long Island Sound, the Hudson and Passaic Rivers for those in Lower New York Bay and Raritan Bay, the Delaware and Schuylkill Rivers for the beds in Delaware Bay, the Susquehanna, Rappahannock, York and James Rivers, together with many smaller streams, for those in Chesapeake Bay, and so on down the coast. In Florida the principal oyster growing areas are to be found near the mouth of the Apalachicola River, the St. Marys River and the St. Johns River. No extensive beds are found in southern Florida because there are no large rivers in that part of the State.

Importance as a Food.†

Vitamins A, D and B are found in oysters in generous quantities, as is also iodine. They have been found valuable in treating both nutritional and pernicious anemia. In some places they are considered a substitute for meat in the diet. They have long been considered a delicacy and many people from the interior of the country on visiting the seashore will avail themselves of the opportunity to consume them on the half shell.

Before the advent of sewer systems the sanitation of shellfish growing areas was not seriously complicated. With the concentration of population along the seacoast in the vicinity of rivers and estuaries, the shellfish sanitary problems began to arise.

There is a considerable amount of evidence in the literature indicating

*Read before the Eighth Annual Meeting of the Florida Public Health Association, Inc., Tampa, December 7-9, 1936.

that shellfish have been responsible for the spread of disease. Recently some of this evidence has been compiled by a committee of the Public Health Engineering Section, American Public Health Association.¹ The first instance that is usually cited was described by Pasquier, a French physician writing about the year 1818, describing an outbreak of typhoid fever which followed the eating of oysters which had been stored in a moat surrounding an old castle in France, the sewage from the castle being discharged into the moat. Seventeen cases of illness were described, six of them being diagnosed as typhoid fever. Two deaths resulted. It is to be noted in this connection that this outbreak was described more than half a century before Pasteur announced the germ theory of disease.

One would think that in France where the connection between polluted shellfish and typhoid fever was thus early noted, great strides would have been made in sanitation of shellfish areas. The contrary appears to be the fact, however. Dr. Ve M. Belin, Director of the Institute of Bacteriology at Tours, France, states in a work² published two years ago that in the fifteen years following the Great War, more than 100,000 cases of illness were due to shellfish and of this number 25,000 deaths resulted in France and her colonies.

United States.

The first well described outbreak of typhoid fever due to oysters occurring in the United States was described by Doctor Conn and occurred at Middletown, Connecticut, about 1894. The chain of evidence established by Doctor Conn is very convincing when studied carefully. The cases occurred in a group of students who partook of a fraternity dinner at which raw oysters were served, the oysters having been floated in the Quinnipiac River at New Haven, a short distance below the outfall of a private sewer which served a house in which there was an active case

1. "Food Value: Anti-anemic power", L. Binet, M. V. Strunza. Paris, Med. 2:28-30, July 1, 1933.

2. "Value of Feeding of Oysters in Pernicious Anemia", H. M. Conner, Proc. Staff Meet., Mayo Clinic, 7:181-184, March 23, 1932.

3. "The Iodine Content of Oysters", E. J. Coulson. Investigational Report No. 18, U. S. Bureau of Fisheries, 1934.

4. "Studies on the Nutritive Value of Oysters", E. J. Coulson. Fishing Gazette, Vol. 50, No. 9, August, 1933. New York City.

5. "Oysters and Anemia", E. J. Coulson, H. Levine, E. R. Lemington. American Jour. Public Health, 22:1141-1146, Nov., 1932.

6. "The Vitamins of Oysters", Jones. Jour. of Nutrition, Dept. of Agric., Bureau of Fisheries, Feb., 1935.

7. "Value in Nutritional Anemia", H. Levine, R. E. Remington, F. B. Culp. Jour. of Nutrition, 4:469-481. Nov., 1931.

8. "Une Nouvelle Forme de la Medication Iodee par l'absorption des Huitres Ayant Fixe et Organise de Fortes Quantites d'iode", Loubatie et Salles, Bull. Acad. de Medecine, 27 Nov. 1929.

9. "The Oyster—Modern Science Comes to the Support of an Ancient Food", H. D. Pease, Jour. of Chemical Education, Vol. 9, No. 10, Oct., 1932.

10. "Vitamins A, D, and B in Oysters—Effect of Cooking upon Vitamins A and B", Dorothy V. Whipple, Jour. of Nutrition, Feb., 1935.

¹¹"Water Storage, Conditioning and Cleansing of Shellfish", Report of Comm. on Shellfish, Public Health Engineering Section, A. P. H. A., Oct., 1936.

¹²"Coquillages et Fievres Typhoides", Dr. Ve M. Belin, France (Paris) 1934.

of typhoid fever at the time. Conn's description of the Middletown outbreak was followed by descriptions of outbreaks in other places.

In 1902 an outbreak occurred at Atlantic City where 80 cases of typhoid fever were ascribed to oysters and clams. Other outbreaks occurred at Lawrence, Long Island, where 21 cases of typhoid fever were ascribed to oysters in 1904; at Ocean City, New Jersey, where 45 cases of typhoid were ascribed to clams in 1909 and 1910 by Hunt; at Newburgh and Goshen, New York, where some 18 cases of typhoid fever and 97 cases of intestinal illnesses were reported by Doctor Stiles, due to oysters. In 1915 Brooks at Binghamton, New York, described 38 cases of typhoid ascribed to oysters, and in 1916 there were 30 or more cases at Shippensburg, Pennsylvania, and Champaign, Illinois, ascribed to oysters, etc. In 1921 some 30 cases of typhoid occurring at Miami, Florida, were ascribed to contaminated oysters by Mr. Simons, formerly State sanitary engineer.

The largest outbreak occurring in the United States happened in the winter of 1924-1925 and included more than 300 cases of typhoid fever described by local and Federal health officials as being caused by the eating of contaminated oysters.

England.

Buchanan in 1895 described an outbreak involving 29 cases of typhoid fever appearing at Brightlinsea. Woodman in 1899 described an outbreak involving some 58 cases of typhoid fever occurring at Exeter and ascribed to the eating of raw cockles (*Cardium edule*). Other forms of shellfish, such as mussels (*Mytilus edulis*), quahogs or hard clams (*Venus mercenaria*), soft clams or long clams (*Mya arenaria*), have been incriminated at various times by various authors in connection with the spread of enteric disease. Mussels have also been found to be responsible for a poisoning due to an active poison found in the mussel during certain periods of the year. Most of the cases of mussel poisoning seem to have occurred in England and in California. The poison is evidently not due to the improper sanitation of the areas in which mussels are produced.

The connection between contaminated shellfish and disease in England was also noted by Bulstrode and Frasier, who described outbreaks of enteric fever ascribed to the eating of shellfish at Mayoralty banquets at Winchester, Southampton and Portsmouth about the year 1902. A good deal of evidence regarding the connection between typhoid fever and shellfish was also gathered by the Royal Commission on Sewage Disposal in its report published about 1904 in England.

The loss of confidence on the part of the public in the safety of shellfish following the occurrence of disease ascribed to contaminated bivalves is a phenomenon common to most shellfish producing areas throughout the world. The industry sometimes refers to these phenomena as "scares." Such a scare occurred in this country about 1906 following the outbreaks above referred to and following the agitation for pure foods. The shellfish commissioner for the State of Virginia in his report for that year refers to the decreased demand for oysters due to this scare. A scare amounting almost to hysteria followed the 1924-1925 outbreak in the United States.

Methods of Dealing with the Situation.

Three methods of handling this problem may be recognized. The first method may be described as the "laissez faire" method, which counts on the shortness of memory of the public and provides for the enforcement of no far-reaching correctional measures to prevent the recurrence of the outbreak.

The second method of control may be described as control by imposed regulations, in which supervising officials attempt to set laboratory standards which are enforced by law upon the industry. The efforts to control the industry in this country prior to 1924 by enforcing regulations under the Federal Pure Food Law, supplemented by uncoordinated and spasmodic activity of some municipal health authorities on the Eastern seaboard of the United States may be said to fall under this heading.

The third method may be described as a voluntary method submitted to and requested by the industry. This method has been successful in England, where the Worshipful Company of Fishmongers, operating under a royal charter and enjoying practically a monopoly of the fish business in London, has voluntarily submitted to regulations imposed by the industry itself. In Holland a similar method appears to be in effect, where the industry has appointed what amounts to a czar who imposes fines for violations to the regulations which he has declared. In the United States the industry voluntarily placed itself under regulations practically before they were enunciated by health officials in 1925, following the outbreak above referred to, so anxious were they to get back into the good graces of the health officials. In return for this voluntary submission they receive certificates saying that they are abiding by the regulations which have been prescribed. This system voluntarily set up has now been enacted into law, or has been included in regulations in all of the shellfish producing States in the United States.

History of Shellfish Control in the United States.

There does not appear to have been much official control exercised over the shellfish industry in the United States from a sanitary standpoint prior to 1894, when Professor Conn called attention to the outbreak at Middletown, Connecticut, due to oysters.

Some measures were taken by some of the producing States intended to improve conditions. However, outbreaks continued to occur at fairly uniform intervals. For a number of years after each outbreak some in the industry attempted to clean up, but after a while others reverted to their old practices with the result that another outbreak occurred from which a large section of the industry suffered.

It is of interest to note that most of the outbreaks reported prior to 1925 occurred relatively near the seaboard. It is conceivable that isolated cases occurred in the interior before 1924 due to the same contamination which was responsible for the outbreaks near the coast, but because only a few cases may have occurred in each community and because not many cities had a good epidemiologist, many of these occurrences probably went unnoticed. The outbreak occurring in the winter of 1924-1925 was an exception in that the cases first attracting attention occurred at points hundreds of miles removed from the seaboard.

At the request of the industry, the Surgeon General of the United States Public Health Service was requested to institute measures that would correct conditions and restore public confidence in the safety of oysters as a food product. He therefore appointed a committee consisting of 18 members, representing the industry itself, State conservation officials and State and Federal Government authorities, who were connected with the production of shellfish, to make recommendations. This committee made a report on September 28, 1925, and made two interim reports—one in October, 1927, and the other in December, 1928. In these reports the committee recommended what may be described briefly as follows:

(1) Each shellfish producing State should set up the necessary machinery and provide the necessary personnel to make surveys of its shellfish producing areas and ascertain which areas should be used to supply shellfish to the market directly and which areas should be closed. Each State was also to issue certificates to shippers desiring to ship shellfish in interstate commerce. These certificates would state that the shipper was obtaining his shellfish from approved areas only and was abiding by the rules and regulations which the State authorities had prescribed for the regulation of the shellfish industry.

(2) The committee also stated that the Public Health Service could perform a useful function by reviewing the work of each shellfish producing State and periodically expressing its opinion of the efficiency and adequacy of the control exercised in each producing State for the benefit of consuming States. Consequently, what might be called a "gentlemen's agreement" was entered into by the shellfish industry on one hand and the regulatory authorities on the other, whereby the recommendations of the committee would be carried out. Subsequently, the essential points in this gentlemen's agreement were embodied either in laws or regulations adopted by the shellfish producing States. Many shellfish consuming States likewise adopted regulations intended to exclude from their States shellfish which have not received proper certifications from the shellfish producing States and approval by the Public Health Service. In view of the fact that many shellfish from States are shipped into Canada and some shellfish, particularly soft clams, are shipped into the United States from Canada, this agreement became international in character and included both Canada and the United States under its provisions. It seems probable that some arrangements may possibly be effected with nations south of the United States to apply to the shellfish trade occurring along our southern border.

The effectiveness of this program is attested by the fact that in the ten years following the effective introduction of the present scheme, less than 50 cases of disease ascribed to contaminated shellfish have been reported,^{1, 2} whereas in the preceding ten years upwards of 500 cases were reported in the United States. Most of the 50 cases were due to contamination reaching the shellfish while in water storage.

¹"An Outbreak of Typhoid Fever and Gastroenteritis Attributed to Consumption of Raw Oysters", Ramsey, McGinnes and Neal, U. S. Public Health Reports, Reprint 1246, Sept. 14, 1928.

²"New Regulations Governing Oysters and Clams", Baltimore Health News, Vol. XIII, No. 8, August, 1936. Baltimore City Health Department.

It should be noted that in nearly all of the outbreaks the principal cause has been the faulty handling or storage of the shellfish following their production or gathering. In this respect it is somewhat similar to conditions in the milk industry. The point at which contamination most frequently enters is in the handling following production. The way this usually happens in the case of shellfish is as follows.

The shellfish shipper likes to have a supply of shellfish conveniently available to take care of unexpected orders. The most convenient place for him is overboard right by the oyster house. Since the oyster house not infrequently is along the waterfront of a small town which may have a sewerage system or at least may have private houses which are sewered into the waterfront, the shellfish so stored are subject to intermittent contamination. In some parts of the country the storage of shellfish is carried on on an extensive scale, and it is combined with a conditioning process which is intended to cleanse the outside of the shellfish and to some extent the insides of the shellfish, and to free them of grit, mud and dirt and perhaps more or less incidentally, also to plump the shellfish and give them an appearance of fatness. The protection of the shellfish from contamination at this stage has been by far the most difficult problem.

The small shellfish shipper has offered a considerable problem in this connection. Frequently he has only a small amount of capital and cannot afford to go to much expense to provide himself with safe water storage facilities. In a recent report of a committee of the Public Health Engineering Section, American Public Health Association, the following principles were enunciated as governing the water storage, conditioning or cleansing of shellfish:

- (1) The sanitary quality of shellfish as they come from safe and approved growing areas should not be impaired in *any* way by the process of floating or water storage.

- (2) Shellfish consumers should not be exposed to any risks because of inadequate equipment or improper location or financial limitations of shellfish dealers desiring to store shellfish in water.

- (3) The financial benefits and advantages of water storage accrue to the oyster dealer; he should therefore bear all the expense necessary to make the practice entirely safe at all times from the standpoint of the shellfish consumer.

- (4) Water storage is obviously not needed in order to protect the public health; on the contrary, it has repeatedly resulted disastrously. The burden of proving that water storage in a given situation is free of all sanitary risks, therefore, rests on those desiring to carry on the practice.

The Public Health Engineering Section of the American Public Health Association adopted the following resolution at New Orleans in October, 1936:

"RESOLVED, that it is the consensus of opinion of this Section that the water storage, cleansing or conditioning of shellfish should not be permitted or practiced in:

(1) Artificial bodies of water unless entering water has a bacteriological quality at all times at least equal to the U. S. Treasury Department standard for drinking water, or

(2) Natural bodies of water which are subject to either constant or intermittent pollution as disclosed by a sanitary survey, and further

(3) That the water storage, cleansing and conditioning of shellfish should therefore be practiced only under conditions in which the sanitary quality of the water is under the most rigid control at all times."

It is to be noted in this connection that the evidence of intermittent pollution is to be ascertained by a sanitary survey rather than by a bacteriological examination of the water. This is necessary because of the difficulty of detecting intermittent pollution when reliance is placed upon bacteriological samples collected at rather rare intervals in a given area. Recognizing this fact, one important shellfish producing State has required that oysters shall be stored only when the water in which they are stored meets the Treasury Department drinking water standards bacteriologically.

The conditioning of shellfish by storing them in clean water leads naturally to the related problem of cleansing shellfish that are moderately polluted. Some progress has been made in this direction in England with reference to mussels and in this country with reference to soft clams. Not much has yet been done as far as cleansing oysters coming from doubtful areas is concerned. This is probably due to the fact that large quantities of oysters from safe areas are readily available for the market at cheaper prices than would be possible if they had to be handled another time to put them through a cleansing process.

The determination of suitability of areas for marketing shellfish calls for excellent judgment based on the best scientific knowledge available. This is so because there is no simple conclusive laboratory tests for pathogenicity, that is, for the disease-causing qualities of shellfish. The only test we know is actual consumption. Since none of us likes to serve as a guinea pig, this latter test is out of the question. Because of these facts, health officers sometimes err in the other direction by closing more areas than they would be justified in closing if complete knowledge were available. This has a bad effect, both upon the industry and upon the health officer. It tends to make the health official ridiculous and tends to break down confidence in the necessity for sanitary control measures. It is almost as serious an error as closing too little area.

Because conditions change from year to year in certain areas, particularly where there is an increase in population along the shore, resurveys need to be made from time to time. Sometimes the changes to which waterfront property is put will also adversely affect shellfish producing areas.

What Can the Public Do to Obtain Safe Shellfish?

Answering this problem, one should say that a community must take enough interest to inquire into the source of the shellfish it consumes and see to it that the local health officer checks the shellfish on the market periodically against the list of approved shellfish shippers, which is published by the Public Health Service and circulated for the information of State and local health authorities who are interested in this subject.

It should be pointed out that the scheme for providing protection to consumers is not coercive. The consumers as represented by the local health officer are free to obtain their shellfish from whatever source they please. If they desire to have shellfish from questionable areas, they can have them. If, on the other hand, they desire to have shellfish which have been handled in a reasonably safe and sanitary manner and where the risks have been reduced to a minimum, they can have such shellfish by merely excluding from the market shellfish which are not certified by the producing States, and whose certifications have been endorsed by the Public Health Service. It is believed that it is safe to say that nearly all of the shellfish consumed today in the United States come from areas which have been carefully studied and are handled by shellfish dealers who are conscientious and careful in the handling of the product.

Summary.

(1) Many instances are cited in which shellfish have been associated with the spread of disease. The first recorded instance occurred about 1818.

(2) The shellfish industry has periodically suffered financial losses due to loss of public confidence in the safety of shellfish. The most recent instance of this occurred in the United States during the winter of 1924-1925.

(3) The gentlemen's agreement made between the industry and regulatory authorities following the outbreak of 1924-1925 to restore public confidence has since been enacted into law in most shellfish producing States and is still in effect.

(4) Most outbreaks including the small ones occurring since 1926 have been due to contamination introduced during the handling of shellfish after they were gathered and while in water storage.

(5) Principles which should govern in the water storage of shellfish are cited.

(6) The greatly reduced incidence of disease ascribed to shellfish since the introduction of the certification system is noted.

BUREAU OF SANITATION**T. S. Kennedy, M.D., Director****WATER LABORATORY***

One of the primary functions of the Bureau of Sanitation since its creation as a department of the State Board of Health in 1916, has been the operation of the Board's water laboratory. The examination of water follows a somewhat different routine from that of specimens submitted by the medical profession to the diagnostic laboratories. In the latter instance, specimens are submitted and results are reported to the medical profession for diagnostic purposes. Water samples are submitted by individuals and municipalities for bacteriological examination and the results are reported directly to those submitting the samples. Routine laboratory procedure is satisfactory when samples examined indicate a water of good sanitary quality, but when laboratory tests question the quality of water it becomes necessary to have the physical surroundings of the water supply investigated and coordinated with the findings of the laboratory. It is for this reason that the Bureau operates the laboratory handling water samples, thus giving one department complete control over the matter of water supply quality. In some instances, it is also necessary to make routine chemical determinations to assist individuals and communities when improvements to their supplies are being considered. Such tests include determination to indicate tastes, odors, color, salinity, iron, etc., which are not indicated in the bacteriological examination. Together with the regular bacteriological examinations, tests are also made to indicate chlorine residual and pH index of certain waters.

To maintain proper control of the sanitary quality of all public water supplies in the State it is necessary to have records showing the quality of water furnished by the supplies at all times. The regular examination of samples from all public water supplies is therefore desirable and, to secure such control, Rule No. 97 of the State Board of Health was passed by the Board. This rule requires the owners or operators of all public supplies to submit samples of water for regular bacteriological examination at the periods designated by the Bureau. The rule further provides that each public water plant in the State shall submit these samples in a standard, official type, water sample case of approved design, the case to be the property of the plant. The sterile bottles in which the samples are submitted are furnished free of charge by the State Board of Health. At the present time 192 supplies in the State are operating under this regulation and thus are under the close supervision of the Bureau at all times.

Operating under Rule 97, the Bureau has divided the public water supplies of the State into two classes—one submitting samples each month, and the other sending in samples each quarter, or every three months. The former applies to all supplies from shallow wells, springs, lakes or

**By Lena W. Starck, Assistant Director.*

BUREAU OF SANITATION

deep wells where some form of treatment is necessary to produce a satisfactory water; the latter to all deep well supplies requiring no treatment, pumped directly into the distribution system, tests of which have indicated consistently good results over a period of years. However, water works operators may submit samples as frequently as desired.

From the above it will be noted that the standard water shipping case with sterile bottles is a part of the equipment of every public water supply plant in the State. In this way the water works operator is in a position at all times to collect and submit samples of water for bacterial examination. Should an emergency arise where question exists concerning the quality of the city water supply the operator will lose no time in submitting samples direct to the Bureau. Complete records are also on file in the city offices of the tests made periodically of the public water supply, and are available for public inspection.

The foregoing paragraphs have referred only to examinations of samples from supplies furnishing water to the public; however, that is only a part of the work handled by the laboratory. Analyses are made free of charge on all samples of water from individual supplies if the water is collected and submitted in the sterile bottles furnished by the department. These containers are submitted to individuals in the State upon receipt of request. The collection of a water sample for bacteriological examination is a delicate task and extreme care must be exercised. Complete instructions concerning the collection of samples are furnished with each sterile bottle submitted by the Bureau, and if at all possible, collections of water from private supplies are made by Bureau personnel.

Bottled waters, sold so plentifully all over the State, are subjected to regular, routine examinations by the Bureau laboratory. Bottled water for sale on the market will indicate on the label the number of the permit issued by the Bureau for the operation of the plant from which it originates. This permit number indicates that the establishment is subject to regular inspection and the water examined periodically in the laboratory.

Water supplies used by common carriers engaged in interstate traffic are examined, and if satisfactory, are certified to the United States Public Health Service. This applies to sources (public supplies as a rule) furnishing water to railroads, steamship companies, and airports. Since 1927, Florida has been reported as 100 per cent certified by the Public Health Service.

All analyses made by the Bureau water laboratory are carried on in accord with standard methods of the Joint Committee on Standards of the American Public Health Association and the American Water Works Association.

During 1936, 4,728 samples were examined in the water laboratory.

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

Marriages Performed, Divorces and Annulments Granted, by
Counties, Florida, 1936

COUNTIES	MARRIAGES	DIVORCES	ANNULMENTS
0. State	24,211	7,002	56
1. Alachua	405	93	0
2. Baker	569	35	0
3. Bay	251	36	0
4. Bradford	175	20	0
5. Brevard	177	56	0
6. Broward	1,827	100	4
7. Calhoun	126	16	0
55. Charlotte	142	23	0
8. Citrus	104	14	0
9. Clay	225	11	0
62. Collier	45	3	0
10. Columbia	264	21	0
11. Dade	2,093	1,777	26
12. DeSoto	118	26	0
56. Dixie	100	23	0
13. Duval	1,807	1,107	13
14. Escambia	908	305	2
53. Flagler	147	16	0
15. Franklin	77	4	0
16. Gadsden	366	12	0
64. Gilchrist	97	3	0
57. Glades	81	9	0
65. Gulf	61	5	0
17. Hamilton	214	38	0
58. Hardee	199*	24	0
63. Hendry	75	4	0
18. Hernando	108	10	0
59. Highlands	145	30	0
19. Hillsboro	1,854	686	0
20. Holmes	214	18	0
66. Indian River	142	10	0
21. Jackson	468	51	0
22. Jefferson	218	5	0
23. Lafayette	92	8	0

*Figure from County Judge—Original Licenses not received.

BUREAU OF VITAL STATISTICS

Marriages Performed, Divorces and Annulments Granted, by
Counties, Florida, 1936— (Continued)

COUNTIES		MARRIAGES	DIVORCES	ANNULMENTS
24.	Lake	256	78	0
25.	Lee	175	48	0
26.	Leon	410	83	0
27.	Levy	199	13	0
28.	Liberty	47	1	0
29.	Madison	293	25	1
30.	Manatee	308	48	0
31.	Marion	422	93	2
67.	Martin	99	12	1
32.	Monroe	122	37	0
33.	Nassau	234	26	1
34.	Okaloosa	238	19	0
54.	Okeechobee	112	16	0
35.	Orange	634	172	2
36.	Osceola	262	51	0
37.	Palm Beach	764	255	0
38.	Pasco	276	26	0
39.	Pinellas	1,018	394	0
40.	Polk	982	331	2
41.	Putnam	318	46	0
42.	St. Johns	390	99	1
43.	St. Lucie	190	42	1
44.	Santa Rosa	403	43	0
60.	Sarasota	209	64	0
45.	Seminole	346	44	0
46.	Sumter	163	37	0
47.	Suwannee	138	39	0
48.	Taylor	175	22	0
61.	Union	81	3	0
49.	Volusia	469	183	0
50.	Wakulla	112	6	0
51.	Walton	247	27	0
52.	Washington	225	20	0

BUREAU OF EPIDEMIOLOGY**A. B. McCreary, M.D., Acting Director****SCARLET FEVER**

Definition: Scarlet fever is an acute infectious disease characterized by sudden onset, high fever, vomiting, sore throat and headache, followed on the second day by a generalized punctiform eruption.

Incubation: Two to seven days.

Etiology: Hemolytic Streptococcus.

Diagnosis: History of contact with scarlet fever, and development of symptoms. Sore throat, vomiting, headache and temperature of 103 to 105 degrees are frequent findings. Within twenty-four hours a red rash appears upon the neck and chest which rapidly spreads upon the arms, trunk and legs. There is usually very little on the face except for the circumoral pallor noted. The eruption is dull red in color, diffuse, pinpoint with no areas of healthy skin in between. The tongue is coated and due to the injection of the papillae, it has the raspberry or strawberry appearance.

The glands in the cervical region are tender and often swollen. As the rash begins to fade the skin appears in fine scales and sheds off. Desquamation generally begins on the second or third day but may last for several days, usually clearing up in from ten to fifteen days, although in some cases it may be longer.

Complications make scarlet fever a dreaded disease. Cervical adenitis, kidney disease, middle ear trouble, mastoiditis, frequently terminating in fatal meningitis, and arthritis, are a few of the distressing complications.

Spread: By direct and indirect contact with scarlet fever cases. Scarlet fever frequently occurs in adults, without the rash or the severe symptomatology noted in children. Infected and enlarged tonsils, septic sore throat, rheumatic fever, certain types of arthritis, chorea and scarlet fever seem to bear some relationship.

So frequently one may hear the milk man, the ice man, or some other visitor to the house comment about having a very sore throat which, however, does not interfere with his going about, and a few days later a child in one of the homes visited develops scarlet fever. The parent is non-plussed regarding the possible source of the disease, and is insistent that the child has been nowhere that scarlet fever existed. The fact that scarlet fever is usually prevalent following circuses or other large gatherings is evidence that the streptococci have been lavishly scattered among the juvenile population by adult sufferers who manifest very few of the symptoms of scarlet fever. Possibly if the terms scarlet fever and septic sore throat were forgotten and in their place was substituted "infectious hemolytic streptococci" which manifests itself in varying ways, dependent upon the resistance of the individual, it might tend to less confusion.

BUREAU OF EPIDEMIOLOGY

A close study of a series of scarlet fever cases revealed that six out of every seven not only had enlarged tonsils but gave a history of frequent attacks of tonsillitis.

It is not improbable that very few of these cases exhibit the rash. It is not at all improbable that many children develop the typical rash and typical symptomatology of scarlet fever from contact with an individual suffering from septic sore throat with little or no other symptomatology, who has gone his way unmolested, spreading streptococci here and there, producing in some instances severe, in others very mild symptoms, or none at all, and in certain groups of children the typical scarlet fever syndrome with scarlatinal rash. Might one be justified in presuming that certain changes take place in the skin following a typical scarlatinal rash which tends to modify subsequent attacks as far as skin manifestations are concerned and leads to the erroneous impression that the disease occurs but once in the same individual?

Control: Isolation of the patient for twenty-one days following onset. Quarantine of contacts for seven days. Disinfection of articles soiled by patients.

Investigation and elimination of the source, if possible.

Education of the public to encourage the use of pasteurized milk, and inspected and protected foods.

HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

STATE BOARD OF HEALTH
JACKSONVILLE, FLORIDA

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Edited by

STEWART G. THOMPSON, D.P.H.

ARTICLES

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MEASLES OR RUBEOLA — *McCreary*

THE TUBERCULIN SKIN TEST — *Logie*

TYPE OF HEALTH OFFICER — *McPhaul*

WORK DONE IN LABORATORIES — *Eaton*

OUTLINE OF SANITATION ACTIVITIES — *Safay*

NURSES AID BIRTH REGISTRATION — *Mettinger*

DEATHS BY COLOR, BY COUNTIES, 1936 — *Thompson*

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Jacksonville, Florida

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CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph D. (U. S. Bureau Entomology)
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ADMINISTRATION**W. A. McPhaul, M.D., State Health Officer****RECOMMENDATION AS TO TYPE OF HEALTH OFFICER**

The Manatee County Medical Society has written a letter to the Board of County Commissioners, regarding the naming of a successor to Dr. J. W. Henagan, county health officer, who resigned, effective March 1, making important recommendations as to the kind of health officer needed, and narrating in considerable detail, the tremendous importance of the work to be done in the county by such an officer.

The county medical society has been in existence about 30 years, and includes in its membership, nearly all the physicians in the county. The letter is signed by the president, Dr. L. W. Blake, and the secretary, Dr. M. M. Harrison.

Following is a copy of the letter:

"I am writing at the request of the Manatee County Medical Society.

"We understand that Dr. Henagan, county health officer, has resigned, and that a new one is to be appointed. Inasmuch as the health and well-being, not only of every one in the county, but also its visitors, is concerned, and that a county cannot be prosperous that is not healthy, we feel that only a man specially trained in the work should be appointed. Great strides have been made in the knowledge of sanitation and hygiene in the past few years. Measures that seemed adequate for sparsely settled communities are not adequate for a modern up-to-date community. The sanitary conditions of one county concern the whole United States.

"We admit that the past administration has done much to improve the health of the county. But much remains to be done. If you will investigate what commercial companies—e. g., the United Fruit Company—do to protect the health of their employees, you will be amazed. They do more in the jungles of South America than we do here in Manatee county, and they find that it pays in dollars and cents.

"We are not asking you to spend one cent more than you are spending at present. We firmly believe that the same amount applied differently will accomplish vastly more. We would like to call to your attention a few of the duties of a modern health officer.

"1. Inspection of food and water supplies;

"(a) He should see that all towns, communities, and schools have pure water.

"(b) Inspection of all places that handle food; e. g., dairies, canning plants, restaurants, meat markets, slaughter pens, etc.; also all people engaged in handling food should be required to get a health certificate from the county health officer, free of charge. A doctor dislikes very much to refuse a health certificate to a poor person, who must work, especially when he knows that some other doctor will probably give it to

ADMINISTRATION

him. Besides, this certificate is to protect the public, not the person being examined, and should be paid for by the public.

"2. Sanitary inspection of all towns, and communities, especially tourist camps. An epidemic starting in a tourist camp may involve the whole United States.

"3. Inspection of school children as has been done in the past, but on a larger scale. In addition to what has been done, e. g., examinations for hookworms, tonsils, etc., and immunizing for diphtheria, we would suggest that all children should have the Mantoux test for tuberculosis and all positive cases should be X-rayed. In addition every teacher should be X-rayed. We believe that this can be done through the state at no additional cost to the county. Great strides have been made in the handling of tuberculosis in the early stage in the past few years.

"4. Instruction of the parents through various means, especially civic organizations, to the effect that they should not wait for the child to reach school age to have him immunized against contagious diseases. Most cases of diphtheria occur in young children.

"5. Prenatal care—some instruction could be given in this through the nurses.

"6. Contagious diseases—all contagious and infectious diseases should be reported to the county health officer so that whatever measures are necessary for their control may be taken. Some sections of the county have more than their share of certain diseases, e. g., malaria and hookworms. Treating the individual patient accomplishes little, but establishing sanitary conditions would do much to eradicate disease.

"7. * * *

"8. Venereal diseases—syphilis is quite a problem, and concerns every one. It may be acquired in various ways. A clinic held once a week for the indigent would go a long way toward its control, and would benefit countless numbers besides those treated, to say nothing of the future generations. Its benefits would reach into the future for hundreds of years.

"We do not feel that a health officer would have time for patients, either charity or otherwise. We do not feel that he would have any time to devote to the county hospital.

"To summarize, we believe that this is the most important position in the county. The proper health officer can accomplish more than any individual doctor. Let's get a man, properly trained, conscientious, and stand by him.

"If you decide on this, we suggest that you consult with the State Board of Health. If you decide on an improperly trained man, let's quit making a pretense, abolish the job, and save money."

BUREAU OF SANITATION**Fred A. Safay, Director****OUTLINE OF SANITATION ACTIVITIES**

The Bureau of Sanitation, created primarily for the purpose of rendering helpful assistance to towns and cities of the state, as well as to organized city and county health departments, is concerned with environmental public health and sanitation problems which include every conceivable subject remotely involving sanitation, excepting such as concern individuals, which are covered by other bureaus of the State Board of Health.

On April first, the writer was promoted to the position of Director of the Bureau following a service of fourteen years with the State Board of Health as District Sanitary Officer with this Bureau. The personnel of the Bureau consists, in addition to the Director, of an Assistant Director and Water Analyst, secretary, one clerk, five District Sanitary Officers and other specialists. The headquarters of the Department is in Jacksonville and all of the activities of the Bureau are directed from this point.

The state is conveniently divided into five districts, each having a District Sanitary Officer to constantly assist in remedying insanitary conditions, and to render such services as may be necessary.

A water laboratory is maintained at headquarters for routine bacteriological examination of water, oysters and for such chemical water examinations as are necessary.

In a general way the Bureau functions have to do with: water supply (public and private); sewerage and sewage disposal; mosquito and malaria control; waste disposal (other than sewage); milk sanitation; rabies control; typhoid investigations (non-medical); sanitation of schools; bottled water supplies; swimming pools; canneries; oyster plants; public fairs; tourist and trailer camps; public buildings and institutions; state institutions; crabmeat plants; special reports and investigations to include drainage wells, pollution surveys in oyster producing areas, impounding waters and many other problems. Disaster relief and rehabilitation work is an important duty of this Bureau and personnel for this duty is always kept in readiness.

In connection with mosquito control work the activities of the Florida Anti-Mosquito Association are handled by the Bureau. This Association was organized December 7, 1922, under the auspices of the State Board of Health and through the efforts of George W. Simons, Jr., who at that time was Director of the Bureau. The Association operates under a constitution which provides for yearly meetings, also that the membership shall be composed of: state, county and municipal officials; members of women's organizations; engineers; members of the medical profession; health officers; sanitary inspectors; those interested in reclamation and conservation; chambers of commerce and all others interested in maximum development and the economic problems of Florida.

ADMINISTRATION

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BUREAU OF SANITATION

The Eleventh Annual Meeting of the Florida Anti-Mosquito Association held in Tampa on March 22-23, was one of the most successful meetings in the history of the Association. The program was interesting and varied, including scientific papers and discussions on malaria control, salt marsh mosquito control and sandfly control. This being the first annual meeting held since the tenth annual meeting in Clearwater in 1932, the history, purposes and aims of the Association were presented by Mrs. Vida Lester MacDonell, a past president of the Association. The Association in 1929 sponsored the State Enabling Act, which permits the formation of Mosquito Control Districts in the state and Mr. W. I. Fee, past president and director of the St. Lucie County Division outlined procedure necessary in the formation of such districts. Districts have been formed in the counties of St. Lucie, Indian River, Pinellas, Dade and Broward, and reports of operation and progress were given by the supervisors.

Entomologist S. E. Shields of the United States Department of Agriculture, stationed at Fort Pierce, reported on "Experimental Control of Salt Marsh Sand Fly Breeding." Dr. T. H. D. Griffiths, Senior Surgeon, United States Public Health Service, Malaria Research Laboratory, Savannah, stressed the value of cooperative efforts in mosquito control. Dr. W. V. King, Senior Entomologist, Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, Orlando, discussed "Repellent Sprays for the Protection of Outdoor Gatherings." Dr. W. A. McPhaul, State Health Officer, spoke of the State Board of Health's plan for mosquito eradication, while Dr. L. L. Williams, Jr., United States Public Health Service, outlined a specific plan for state-wide malaria control.

The use of CCC labor in mosquito control was presented in a report of G. H. Bradley, Associate Entomologist, United States Department of Agriculture, who covered the problems as handled in the northeastern states. Capt. K. J. Boyd, District Manager of the Florida Power Corporation, Tallahassee, reported on mosquito elimination program on the impounded area at Lake Talquin. A most comprehensive and enlightening malaria symposium formed a part of this program which included the following: "W.P.A. Malaria Mosquito Control Accomplishments," A. C. Newman, Assistant State Director, Malaria Control; "Research in Malaria," Doctor L. T. Coggeshall, International Health Division, Rockefeller Foundation; "Malaria Control in Georgia," L. M. Clarkson, Chief, Division of Engineering, State of Georgia, Department of Public Health, Atlanta; "Report of Work of Malaria Investigations Office at Miami," C. T. Carnahan, Associate Public Health Engineer, United States Public Health Service, Malaria Investigations; "Report on Malaria Survey by Means of Examination of School Children for Splenomegaly in Counties in Northwest Florida," Dr. J. E. Elmendorf, Staff Member, Rockefeller Foundation and Dr. Mark F. Boyd, Director, Field Office, Rockefeller Foundation, Tallahassee, Florida. George W. Simons, Jr., presided at all of the above sessions and was largely responsible for success of the meeting.

BUREAU OF SANITATION

One of the important actions of the Tampa meeting was the adoption of a resolution to secure convict labor in mosquito control.

The 1938 meeting will be held in Jacksonville.

In conclusion, the writer wishes to take this opportunity to assure individual citizens and all public officials throughout the state that it is our desire to be of every assistance to them in solving their problems pertaining to health and sanitation as covered in the above outline. There are no fees connected with any services of this department.

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF JANUARY, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites ..	2188	855	211	132	116	3502
Diphtheria	831	318	77	782	39	2047
Typhoid	976	213	44	75	28	1336
Malaria	908	209	46	37	156	1356
Rabies	20	2	..	3	...	25
Tuberculosis	386	148	23	52	22	631
Gonorrhea	1285	479	207	448	145	2564
Kahn	7663	3683	512	5380	437	17675
Water .....	...	39	8	203	...	250
Milk	271	336	90	329	109	1135
Miscellaneous	937	43	126	318	34	1458
	15465	6325	1344	7759	1086	31979

Specimen containers distributed.....15195

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	35 Packages
	5,000 units	21 Packages
Schick		3530 Tests
Toxoid.....		1950 C. C.
Typhoid Bacterin.....		3670 Treatments
Vaccine Virus.....		2800 Capillaries
Antirabic Virus.....		53 Treatments
P. P. D. Tuberculin.....	100 Test Packages	21 Packages 1st dose
		21 Packages 2nd dose
	10 Test Packages	7 Packages 1st dose
		7 Packages 2nd dose

COUNTY HEALTH WORK**A. B. McCreary, M.D., Director****MEASLES OR RUBEOLA**

Measles is an acute, epidemic, highly contagious disease accompanied by fever, catarrhal inflammation and a blotchy macular rash.

Etiology: Said to be a filterable virus. *Unknown.*

Incubation: Ten to seventeen days, occasionally as late as twenty-one days.

Diagnosis: History of contact with measles, and the development of symptoms. There is a prodromal stage of about four days prior to the appearance of the eruption. The catarrhal symptoms are first noted, coryza, sneezing, lacrimation, photophobia, brassy cough, and a temperature of 101 to 103 degrees. Pathognomonic, Kopliks spots, bright red, slightly elevated spots with minute white speck in the center. Headache, anorexia, drowsiness and irritability are present.

The rash appears first upon the face and neck in the form of red pin-head-sized papules or slightly elevated macules which spread rapidly to the chest, trunk and extremities. Within a few hours the whole body is covered. The macules vary in size from pinhead to fingernail, are irregular in outline and sharply margined. On the first day of the eruption the lesions are small and discrete. The macules subsequently enlarge, coalesce and become very blotchy and irregular. Grouping and lack of symmetry are characteristic of measles macules. (During the next two days the eruption fades and within seven or eight days from the onset the temperature is normal and desquamation is taking place in the form of fine branny flakes, first upon the face and then in the sequence of the eruption.)

Spread: Direct or indirect contact with measles.

COUNTY HEALTH WORK

Control: Isolation of patients and susceptible contacts. Patient for fourteen days and the contact for at least seventeen days. If the date of exposure is positively known the contact may be allowed the first seven days grace and quarantined for the remaining ten-day period. The difficulty of measles control by quarantine methods is known to every physician and health officer. Immunization with convalescent serum, whole blood, globulin or some other recognized immunizing agent offers the greatest protection.

The death rate from measles and its complications, especially among infants and smaller children, is now greater than that of diphtheria or scarlet fever. This bespeaks the necessity of control measures. If the administration of the serum can be timed properly following exposure (5 to 7 days, 3 or 4 c. c. of convalescent serum) it is possible to allow a very mild modified case of measles which will produce a permanent active immunity. If given early and in sufficient quantity the serum will produce a passive immunity which will last about sixty days, and it will be necessary to repeat this at each exposure following the period of immunity. Sometimes it is highly advisable to prevent the development of measles in very young infants. The parent should discuss this with the family physician. Many conditions may be present which make it highly advisable to postpone measles or the acquiring of the active immunity by mild cases to a later date when the physical condition of the child is more acceptable to the physician.

Measles is a dangerous disease and should be regarded as such by the public. Too frequently the careless parent can see no connection between the sending of a husky boy (broken out like a broiled lobster) to school and the death of a neighbor's baby which can usually be traced through a series of contacts to the original source.

BUREAU OF TUBERCULOSIS**A. J. Logie, M.D., Director****THE TUBERCULIN SKIN TEST**

Many of us do not realize the significance or importance of the skin test for tuberculosis. All of us are born free of the germ of tuberculosis since tuberculosis is not inherited. The tuberculin skin test is rarely positive if no germ of tuberculosis is in the body. Consequently at birth, we all have a negative skin test. A child will remain negative to the test until he comes into contact with the germ. A few weeks after such contact the test will become positive and remain so in the vast majority of cases. The only possible source of the infection is from the person with the active disease who is coughing or spitting up the germs. The younger the child with a positive tuberculin test, the more likely is it that the source of the infection lies with some member of the immediate family. The older the child, the greater are the chances of picking up the infection through contact with some source outside his own family, such as playmates, school chums or even school teachers. Naturally, the adult who comes into contact with many individuals in his daily routine is exposed to a greater field of possible sources.

The tuberculin skin test informs us whether or not the individual has any germs of tuberculosis in him. If the test is positive it tells us that at some time in that person's life the germ has invaded his body, but it does not tell us whether the disease of tuberculosis is present—only an X-ray picture of the chest of a positive reactor can tell us whether the disease is present at an early stage. The stethoscope is of little value for diagnosing early tuberculosis. We must remember that germs of tuberculosis may be present in the body without producing the destructive type of tuberculosis. There is no cause for alarm when the doctor tells us that our child has a positive reaction, providing a chest X-ray shows no evidence of the disease. There is no reason for that child to be kept out of school. He will not infect anybody else. However, he should be examined by the X-ray every year and his general health must be watched and maintained at a good level.

If a young child shows a positive reaction, the family should be examined for the source of the infection so that the contact may be terminated or controlled in order to avoid the probable production of the active disease through such continuous intimate contact. In an older child not only the family but also his playmates, school chums, and school teacher should be investigated as the possible source.

The test in itself is absolutely harmless and will not produce any discomfort. A small abrasion is made on the skin of the forearm. This place is examined in forty-eight hours and if it then is slightly swollen and red it denotes a positive reaction. The size or intensity of the reaction bears no relationship to the amount of infection; however it may indicate the amount of sensitivity. In some cases two skin tests are necessary.

BUREAU OF TUBERCULOSIS

A positive child should have an X-ray of his chest and his associates should be examined for tuberculosis. A negative child should have the test repeated at least once every two years.

At five years of age approximately fifteen per cent of children show a positive skin test. As the child ages the incidence of positive reactions increases. In adults the percentage of positive reactions varies up to ninety-five per cent. In families with tuberculosis seventy-five per cent, if not all, of the children will become infected with the germ, and as many will come down with the disease if the source of infection is not controlled.

Those children who should have the tuberculin skin test are contact cases; that is, those associated with known cases. Next in preference would come the high school group, the elementary school group and the preschool child (1 to 5 years) in the order mentioned.

In a child who has been negative to repeated tuberculin tests, and who eventually shows a positive reaction, we have definite information to the effect that infection occurred in the interval since the last negative reaction was obtained.

The tuberculin skin test is at our disposal. Shall we neglect a harmless procedure which is of such tremendous value in the prevention and control of tuberculosis? Common sense says no!

BUREAU OF DENTAL HEALTH

E. C. Geiger, D.D.S., Director

YOUR CHILD'S TEETH*

The condition known as malocclusion, or teeth out of their normal position, increases the susceptibility of teeth to decay because crooked teeth are difficult to keep clean. It is also a fact that when teeth are crowded out of the arch the jaw is shortened in proportion to the displacement. This condition influences receding chins, which make otherwise strong, characterful faces appear weak. Then again, if the lower jaw is shortened by the premature loss of the temporary teeth, and the upper jaw is not, a child often has the appearance of a mouth-breather, with a protrusion of a short upper lip, and conspicuous overhanging upper front teeth. The premature loss of temporary teeth on the upper jaw also influences its size, making it smaller and often narrower. This causes a constriction of the nasal fossa, which encourages the growth of adenoids, and causes other respiratory disturbances.

*Continued from February issue.

BUREAU OF DENTAL HEALTH

The logical conclusion is that the retention of the temporary teeth, until natural shedding, is of paramount importance. It is also logical, in view of the fact that the process of shedding covers a period of seven years, that the so-called temporary dental treatment of temporary teeth, often requested because parents do not understand their importance, is not the most desirable, practical or economical treatment.

X-rays of children's mouths not only show the temporary teeth, but they also show the permanent teeth which are forming, and their relation to the temporary teeth and to each other and any cavities between the teeth.

The assertion was made earlier that toothache can be prevented. Toothache, generally speaking, is the result of decay—a cavity in a tooth. Large cavities, those that encroach upon the nerve, and cause toothache, do not just happen. They were once small cavities; too small to make a tooth ache. It must be obvious, then, that if all of these small cavities can be located and filled before they become large, the child will not suffer from the inconvenience of toothache.

The "keystone" of the dental arch, and an important influencing factor in the shape and size of the jaw, is the first permanent molar tooth. It erupts between the ages of five and seven and makes its appearance just in back of the last temporary tooth.

Many times, really conscientious parents neglect this first permanent tooth, because they assume that it is a "baby tooth" and will soon come out of its own accord. The child is not taken to the family dentist until the tooth is so badly decayed that it must be removed. This leaves a space which permits neighboring and opposite teeth to drift. This condition influences crooked teeth, a receding jaw and unattractively arranged teeth, which are readily susceptible to decay.

Parents should watch for the eruption of the first permanent molar tooth; it is the signal that the other permanent teeth are on their way. These permanent teeth must be guarded and protected. The same factors which influence irregularities and loss, caused by disease in the temporary teeth, affect the permanent teeth. There is this difference, though. In the loss of a temporary tooth, one can usually look forward to its replacement by a permanent tooth, but a permanent tooth, if lost, is gone forever, and its only replacement is an artificial substitute.

BUREAU OF PUBLIC HEALTH NURSING**Ruth E. Mettinger, R.N., Director****NURSES AID BIRTH REGISTRATION**

Realizing the importance of educating the public to the needs of birth registration, the Bureau of Public Health Nursing has, for many years, cooperated with the Bureau of Vital Statistics in teaching the importance of this work and in securing certificates for unreported births.

While the nurse, on her daily visits to the home, usually inquires about the registration of the baby, we felt that with one week's specific concentration on this work, better results would be obtained.

During the last week of January, this year, all nurses in the state were asked to report to the Bureau of Public Health Nursing the births that were not registered. Many interesting narratives have been received. We quote an experience of one nurse. "One mother said she did not see any use in those things because she knew when her baby was born and knew she was her mother—that no one had to remind her of it. When I explained how necessary it was to have a birth certificate even to be able to enter the child in school, and a number of other things where it would be necessary, she seemed to understand and to appreciate this information and went to her physician to have a certificate filled out."

Another excerpt from a nurse's report: "January 21 to February 1 has been our round-up campaign to secure birth certificates for unreported births. The round-up is in cooperation with the Bureau of Vital Statistics of the State Board of Health and the goal is 100% birth registration in Florida for 1936. Have visited the registrars, and as many homes as it was possible for me to visit, and have given several talks in the school regarding this. Found quite a number of children born in 1936 who do not have certificates but their births have now been recorded."

We have reports also that the midwives, both white and colored, are giving splendid cooperation and are registering their babies.

We have no trouble in impressing upon the parents the importance of having their physician or midwife see that their baby is registered. Indeed, parents should be *more* interested in birth registration than the doctor or midwife.

We feel gratified over the results of this one week's concentration on birth registration and are asking our nurses to continue to point out the reasons for birth registration as outlined in the little brown pamphlet published by the Bureau of Vital Statistics. This pamphlet will be given to anyone upon request.

BUREAU OF VITAL STATISTICS

Stewart G. Thompson, D.P.H., Director

Total Deaths by Color and by Counties, Florida. 1936

COUNTIES	DEATHS		
	Total	White	Colored
0. State	20,948	13,605	7,343
1. Alachua	495	268	227
2. Baker	54	28	26
3. Bay	172	136	36
4. Bradford	74	53	21
5. Brevard	185	125	60
6. Broward	326	196	130
7. Calhoun	68	53	15
55. Charlotte	46	32	14
8. Citrus	53	34	19
9. Clay	91	70	21
62. Collier	30	16	14
10. Columbia	341	177	164
11. Dade	2,262	1,697	565
12. DeSoto	100	82	18
56. Dixie	58	26	32
13. Duval	2,433	1,251	1,182
14. Escambia	868	560	308
53. Flagler	27	10	17
15. Franklin	85	44	41
16. Gadsden (Ex.)	322	112	210
State Hospital	343	215	128
64. Gilchrist	35	29	6
57. Glades	17	10	7
65. Gulf	32	18	14
17. Hamilton	89	44	45
58. Hardee	107	99	8
63. Hendry	36	20	16
18. Hernando	53	37	16
59. Highlands	136	99	37
19. Hillsborough	1,915	1,438	477
20. Holmes	122	116	6
66. Indian River	94	63	31
21. Jackson	368	202	166

BUREAU OF VITAL STATISTICS

Total Deaths by Color and by Counties, Florida. 1936—(Continued)

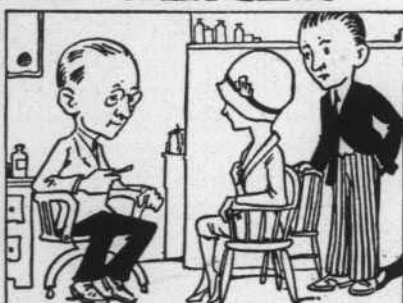
COUNTIES	DEATHS		
	Total	White	Colored
22. Jefferson	194	37	157
23. Lafayette	33	26	7
24. Lake	373	259	114
25. Lee	187	142	45
26. Leon	365	114	251
27. Levy	143	80	63
28. Liberty	36	27	9
29. Madison	222	87	135
30. Manatee	313	212	101
31. Marion	468	187	281
67. Martin	37	21	16
32. Monroe	165	124	41
33. Nassau	109	62	47
34. Okaloosa	119	103	16
54. Okeechobee	22	14	8
35. Orange	802	615	187
36. Osceola	155	117	38
37. Palm Beach	729	394	335
38. Pasco	137	119	18
39. Pinellas	1,318	1,129	189
40. Polk	902	693	209
41. Putnam	317	174	143
42. St. Johns	266	137	129
43. St. Lucie	92	58	34
44. Santa Rosa	139	113	26
60. Sarasota	166	121	45
45. Seminole	273	123	150
46. Sumter	100	60	40
47. Suwannee	181	110	71
48. Taylor	108	56	52
61. Union	69	32	37
49. Volusia	681	496	185
50. Wakulla	47	27	20
51. Walton	129	99	30
52. Washington	114	77	37

• BILL JONES *and* CANCER •



Mrs: "Bill, I think this lump I've noticed ought to come out."

Bill: I don't believe it's anything, why worry?



Doctor: The lump is very small and it will be only a slight operation to take it out."



Doctor: If more women were like you and had lumps removed promptly, we'd have much less cancer to worry about."

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HUMAN LIFE IS THE STATE'S GREATEST ASSET

FLORIDA



HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

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JACKSONVILLE, FLORIDA

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No. 5

Edited by

STEWART G. THOMPSON, D.P.H.

ARTICLES

MOTHER'S DAY — *Mettinger*

EXPANDED HEALTH WORK — *McPhaul*

WORK DONE IN LABORATORIES — *Eaton*

RAGWEED AND PUBLIC HEALTH — *MacDonell*

TOTAL BIRTHS BY COLOR, BY COUNTIES, 1936 — *Thompson*

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Jacksonville, Florida

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CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph.D. (U. S. Bureau Entomology)
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ADMINISTRATION

W. A. McPhaul, M.D., State Health Officer

EXPANDED HEALTH WORK

The addition of several new bureaus and the reorganizing of others in the State Board of Health spells a new and expanded era in public health work in Florida. Recent action by the State Board of Health naming several new department heads emphasized the rapid growth of the public health program in Florida during the last year and a half.

Through provisions of the social security act operating through the United States Public Health Service and the Children's Bureau of the Department of Labor, it has been possible to plan a long range program which extends as far as possible, into every phase of public health work.

The new bureaus and those which have undergone reorganization are as follows: County Health Work; Maternal and Child Health; Epidemiology; Tuberculosis; Dental Health; Health Education; the Mobile Health Unit and the Bureau of Venereal Diseases.

The Bureau of County Health Work is performing a most important function in the organizing of individual county health units. These units are maintained by funds supplied by the county and the United States Public Health Service. At the present time there are 15 counties enjoying the benefits of individual public health services. Three of these were operating on January 1, 1936. A large number of other counties have signified their intention of establishing such a unit.

The principal function of the Bureau of Maternal and Child Health is education. Both prenatal and postnatal instruction is given. Lecture courses by nationally known obstetricians and pediatricians are arranged for the benefit of the private physicians. Instruction to midwives comes under this department and also the licensing of these persons which is required by State law. Examining of school children up to and including the twelfth grade is also one of its functions.

The Bureau of Tuberculosis concerns itself with the control of the disease through education and tuberculin testing. At the present time a program is being inaugurated in the public schools of the State to examine all children from the seventh to the twelfth grades, inclusive. This work is being done with the cooperation of the State and county education departments. It is hoped to eventually expand the program to include all children of school age. A portable X-ray machine will be used by the Bureau to X-ray all indigent children whose tuberculin test is positive.

Vital statistics is another cog in the wheel of public health without the help of which no long range program could be intelligently planned. The periodical reports on mortality and morbidity act as barometers on the work done and serve to dictate the needs of the future.

The duties of the Bureau of Epidemiology are wide in their scope and of vital importance to the general welfare of the State. As the term im-

ADMINISTRATION

plies, its chief responsibility is the reporting and control of communicable diseases. Diagnosing the causes and sources of epidemics and recommending means of checking them is one of its important responsibilities.

The Bureau of Dental Health concerns itself with the important factor of dental hygiene among both school children and adults. A puppet show, depicting the chief points of dental hygiene, recently played to over 90,000 school children in Florida. As a result of this the Bureau received and has on file some 15,000 letters from pupils who attended the performances. This Bureau also has a program under way in the elementary schools of the State to inspect the teeth of children. If dental defects are found a notice is sent to the parents recommending a thorough examination by the family dentist. Information on care of the teeth during the prenatal and postnatal period is also distributed.

The Mobile Health Unit has as its chief function the teaching of modern public health methods and procedures to the field staff engaged by the State Board of Health.

Another of the new bureaus whose importance cannot be over-estimated is the Bureau of Venereal Diseases. Eventually it is hoped to establish clinics to assist the physicians in the care of indigent cases and to educate the general public in the proper methods of control and prevention.

Although it was only recently that the Bureau of Health Education was made a separate department, the education of the public in proper health measures has always been the chief underlying motive of all public health work. This Bureau has charge of all pamphlets and written material which is sent out by the Health Board and assists each of the other departments in planning and promulgating their individual programs of education.

The Bureau of Sanitation is perhaps more familiar to the general public than any of the others. The inspection of food, milk and water come under this department along with the enforcement of laws relating to the proper disposal of sewage and garbage. Malaria control is another of its functions.

A work which has taken up a considerable amount of time has been the inspecting and licensing of trailer camps in Florida. Last season it was estimated that there were over 100,000 persons living in these camps. Uncontrolled camping of this sort would be disastrous to the health and welfare of any State.

The Bureau of Nursing is the bulwark of any public health program and in Florida especially where so much of the population is rural the job of the public health nurse is an important one.

The Division of Drug Inspection includes enforcing the laws pertaining to drug stores and pharmacists. State narcotic laws are also enforced by this department.

ADMINISTRATION

Another evidence of the enlarged program is the new addition to the State Board of Health building on Second and Julia Streets. Recently Washington approved a project calling for a second addition which will be used to house the offices of the Bureau of Vital Statistics, now occupying space in the Florida Theatre Building.

The general welfare of any community is limited by the fitness of its inhabitants and the conditions of its environment. The State Board of Health was created for the public good and as such should be regarded as a most vital part of our social structure.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

MOTHER'S DAY

Long in advance of the second Sunday in each May, the florists, the telegraph companies and the greeting card concerns all tell us that it will soon be Mother's Day. We see advertisements in papers and magazines, in shop windows and other prominent places, admonishing us to "Remember Mother." Accompanying these advertisements, there usually is a picture of a nice, comfortable-looking mother, verging on middle age. But the picture and the slogan rarely bring to mind the picture of mothers, especially young mothers, struggling to bring forth a new life into this world; mothers dying because they do not have even the common necessities of life; mothers dying because they did not know the simplest hygienic measures of pregnancy; mothers who become invalids for life because they have borne a child; mothers who bring forth diseased and sickly children — no, we do not think of these as we see the sweet, gray-haired woman of the magazine advertisements.

Yet we are shocked by the loss of life in a school disaster in Texas, the sinking of a ship on the high seas, or in the crash of an airplane. We read the resultant publicity and of the measures that are being taken so that this type of tragedy may never occur again; but what publicity do these many mothers receive who die each year in or because of childbirth? Only a small obituary notice in the daily paper. If we were to hear that a disaster had occurred in which 12,885 people had lost their lives, we would be shocked beyond measure. Yet that is the number of mothers who lost their lives in 1931 from causes directly concerned with the puerperal state.

The real tragedy in maternal deaths is that so many of them are not necessary; that just a little knowledge might have saved a life. We might

BUREAU OF PUBLIC HEALTH NURSING

well contemplate the 1934 report on the "Evaluation of Prenatal Care" by the Yale University Institute of Human Relations in which is contained these significant phrases: "The general run of fairly normal pregnancies might apparently be expected to fare about as well with a minimal amount of well-timed prenatal care as with a considerably greater outlay of time and expense for antepartum supervision. . . . A considerable portion of intermediate prenatal care could be taken care of satisfactorily by nursing visits."

We, as public health nurses, by persistent teaching, can do much to reduce maternal mortality. This must involve not only the teaching of the prospective mothers themselves — and fathers, too, — and the imparting of concrete information, but must also include appreciation of what constitutes good medical and nursing care.

May the day soon come when every day will truly be a Mother's Day, when this continuous, so often needless, waste of human life has been curbed. Should not our slogan be, too, "Remember Mother (s)"?

SEEING IS BELIEVING

Would you believe that the poorest and most illiterate man in the swamps and backwoods of Florida can be taught to make his home a habitable place in which to live? That his wife can be taught the meaning of cleanliness and the care of herself and family before and after her children are born? That with materials near at hand and theirs for the taking, their home can be transformed from a hovel into a palace to them out of a few discarded boxes, a little paint, a few nails and *some* effort? That they can be taught that the health and comfort of their children and themselves is paramount to their happiness?

It has been said that people are more eye-minded than ear-minded; that whatever they can see and touch is retained much longer than what they can only hear. With this in mind the Florida State Board of Health has available for lending to Directors of County Health Units and Public Health Nurses, various types of equipment with which to demonstrate the many articles that can be made with the resources near at hand.

Here are some of the reasons why baby should sleep alone: it eliminates the danger of being smothered by the mother; removes the hazard of sleeping with parents who may have some communicable disease in the incipient stage; teaches baby good health habits; makes weaning easier. As baby beds and mattresses are apt to be expensive the best results are secured when the parents can be shown actual working models for making these beds and mattresses. Would you believe that a baby's slat bed can be made out of discarded boxes, short lengths of lumber, (many times given away as too small to sell), five cents' worth of small nails, two sets of screws costing five cents and two metal strips to hold the mosquito

BUREAU OF PUBLIC HEALTH NURSING

netting for twenty-five cents and the paint ten cents, making a total of forty-five cents?

Would you believe that the fluff from "Cattails" found growing in almost every county in Florida could be used for making a baby's mattress after it had been baked in a warm oven to kill insects? By the way, this cattail fluff is much like kapok.

Would you believe that Florida moss when cured makes a comfortable mattress, using flour sacking for ticking? That a homemade bed-bath stand can be made of discarded wooden boxes and scrap lumber? That an improvised bed pan (12"x17") can be made from a biscuit pan, costing from ten to fifteen cents, and a section of a prune box with a little paint? An ordinary bed pan when purchased costs about two dollars and a half.

Would you believe that baby's improvised potty can be made from a cigar box and an empty coffee can, and that mothers are being taught to begin to teach their children to use the potty when just a few weeks old?

Flour sacks have become an important factor in the homes of many Florida families and the thin ones are used for babies' dresses and petticoats. Even if you paid a dollar a yard for it you could not get anything softer for a new baby's delicate skin. Burlap sacks (feed sacks) can be made into expensive looking coat suits and sport dresses. The uses to which these crude articles can be put are being taught to many people of our State by showing them a finished article and explaining the way in which it is made. To see and touch the original of the article to be made has been found the simplest method of teaching most people.

It is known that Florida has the unenviable reputation of leading every State but one in its high maternity death rate. The care of the mother before the birth of her child and the care of her baby is being particularly stressed. The significance of proper lighting, cleanliness and sanitation is taught mothers through demonstrations with miniature model houses and articles.

Cattle are dipped for ticks—hogs are treated for cholera—what is your county doing to reduce the maternal and infant death rate?

BUREAU OF LABORATORIES**Paul Eaton, M.D., D.P.H., Director****SUMMARY OF WORK DONE IN THE LABORATORIES OF THE
STATE BOARD OF HEALTH DURING THE
MONTH OF FEBRUARY, 1937**

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	2291	706	319	98	149	3563
Diphtheria	804	424	91	372	19	1710
Typhoid	813	163	39	73	10	1098
Malaria	848	172	32	31	137	1220
Rabies	43	3	..	..	...	46
Tuberculosis	248	160	36	51	19	514
Gonorrhea	1271	385	177	417	111	2361
Kahn	6323	2786	481	3215	463	13268
Water .....	....	48	12	171	...	231
Milk	221	294	66	299	6	886
Miscellaneous ..	576	34	93	295	18	1016
	13438	5175	1346	5022	932	25913

Specimen containers distributed.....11,514

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	63 Packages
	5,000 units	18 Packages
Schick.....	3420 Tests	
Toxoid.....	1775 C. C.	
Typhoid Bacterin.....	3880 Treatments	
Vaccine Virus.....	1290 Capillaries	
Antirabic Virus.....	51 Treatments	
P. P. D. Tuberculin.....	100 test pkgs.	15 Pkgs. 1st strength
		15 Pkgs. 2nd strength
	10 test pkgs.	4 Pkgs. 1st strength
		4 Pkgs. 2nd strength

RAGWEED AND PUBLIC HEALTH***GEORGE N. MacDONELL, M.D.**

Director of Public Health, Miami, Florida

Atmospheric conditions have always been recognized as exerting an important influence on the health of individuals. In this paper the contamination, or, more properly, the pollution, of the air we breathe is discussed without considering alterations in the atmosphere due to temperature changes. However, air in motion, more specifically, prevailing winds, has an important bearing on the subject.

*Read before the eighth annual meeting of the Florida Public Health Association, Inc., Tampa, December 7-9, 1936.

Extensive studies have been made concerning the effect of smoke, dust and fog on the human system and it has been demonstrated that smoke and dust set up an irritation of the respiratory passages often leading to organic changes. All three are recognized as obscuring to a greater or less degree the sunshine which is so important to human well being.

In addition to these there is another contaminant of the atmosphere, which, though not commonly suspected, both irritates man's breathing outfit and deprives him of the valuable sun rays which should reach his body. I refer to the air-borne pollens from trees, plants, grasses and weeds. The term air-borne is used advisedly, for, fortunately, most pollens are either heavy or covered with a sticky substance which prevents their being dislodged by the breezes to form a sun screen or to be wafted to man's nostrils, where they cause physiological changes. To this latter class belongs the pollen of goldenrod, that gorgeous and muchly maligned flowering plant.

Perhaps the greatest transgressor among air-borne pollens is ragweed, the exceedingly fine pollen of which in certain areas is discharged into the atmosphere literally by the ton. The ragweed family is a large one, botanically known as *Ambrosiaceae*, of which the true ragweed, *Ambrosia*, predominates. Why such a pestiferous plant should have been given the name of "ambrosia" is just one of those unfathomable mysteries which abound in the realm of scientific nomenclature. *Ambrosia* was supposed to be food for the gods, but it is certain that if it in anywise resembled the plant we know, then a gathering of the immortals must have been like a hay fever convention. Perhaps it was only Jove sneezing that gave origin to the famous thunderings from Olympus.

Just how many angstroms of the ultra violet rays—those health-giving rays of the sun—are absorbed or deflected by the millions of pollen granules, of which ragweed contributes the greater part, has never been calculated, but it is certain that they are responsible for depriving mankind of much that rightfully belongs to him, for the weed is found in most parts of the globe. Let us hope that, minute as they are, they may be of value in producing a certain diffusion of light beams and even contributing to the painting of more gorgeous tints in the coloring of the sunset. Other things being equal, that portion of the earth which is free from the screening effect they produce should have healthier, happier people.

But, as important as may be the effect on health they thus produce when floating in the substratosphere, they sweep along earth's surface in certain areas in more intimate contact with man to his hurt and physical deterioration. The great ocean of air at the bottom of which man, the air breathing animal, lives and moves, is, undoubtedly to a certain extent, muddied by their presence. Their irritant effect on nasal passages and bronchial tubes has never been accurately determined, but that they exert a real effect in aggravating existing tendencies and conditions in human beings can be easily deduced.

It is fortunate that the growth of ragweed is confined to areas which seem to provide suitable conditions of soil and rainfall. Wind movements also have a bearing on the incidence of its annoying pollen. More fortunate, perhaps, is the fact that it is seasonal, its prevalence corresponding to its pollination covering a period of six to eight weeks. A large number of people in the United States variously estimated at from 500,000 to 2,000,000 are afflicted with pollinosis, seventy-five per cent (75%) of whom show an allergic reaction to ragweed pollen, causing them suffering, annoyance and discomfort often to the point of incapacitating them from economic service. The symptoms of hay fever or hay asthma are too well known to need a detailed description here, but any one who has seen one of these sufferers at the height of the season beholds an individual who seems to be afflicted with a severe cold at its worst stage—blear-eyed, sneezing, miserable and dejected. Remedies of every description are tried, but they are all in vain. Only palliative effects are obtained and these are but transient and fleeting. The unfortunate individual has to worry through somehow until the ragweed sheds all its pollen.

In most parts of the country the hay fever season extends from about August 15 to October 15.

An increasing number are finding relief by having administered to them a ragweed pollen extract which produces a desensitizing effect. However, due to the fact that this treatment should be commenced weeks in advance of the expected attack, many start too late to obtain relief by this method and fail to derive expected benefits.

Afflicted ones who are able to do so escape the attack entirely by going to areas where ragweed is not known to grow or where it has a very low incidence. The relative prevalence of ragweed distribution in the United States has been worked out by Mr. O. C. Durham, Chief Botanist of the Abbott Laboratories of North Chicago. Carefully controlled experiments carried out by him show that the potential ragweed district is roughly that territory lying east of the Rocky Mountains, comprising about three-fourths of the total area of the country and holding nine-tenths of the population. From this it can be seen that the relation of ragweed to public health is clearly obvious.

Fortunately, this pestiferous weed is not uniformly distributed throughout this area, for while some localities, particularly in the Mississippi River basin, show a high incidence of ragweed, others like Florida, particularly in the eastern and southern part of the peninsula, are almost entirely free from it. Dr. Durham has prepared a scale in which Buffalo is rated at 100, Tampa is 8, Jacksonville 1, and Miami 0. Other cities are Indianapolis 124, St. Louis 93, Omaha 87, Kansas City 85, Louisville 84, Chicago 74, Memphis 63, Pittsburgh 57, Philadelphia 41, New York City 20, Boston 15, and Charleston 11.

While the Pacific Coast is practically free of ragweed, Florida proves to be the surest haven of refuge easily accessible to which the vast army of sufferers can flee for relief during the hay fever season. This is par-

ticularly true of the East Coast of Florida, where the prevailing winds are mostly from the Atlantic. At Miami seventy-two per cent (72%) of all breezes are from the northeast, east, or southeast.

Since Florida thus offers an asylum for hay fever sufferers, efforts should be made to acquaint them with the peculiar advantages we have to offer them. This would attract to our State during the months of September and October many hundreds of visitors who have no communicable disease, but who would be relieved of their malady upon arrival. They would return to their homes singing the praises of their new found refuge and would return each season bringing an ever increasing number of fellow sufferers.

A word of caution should be added. While this area as a whole has a very low index, undoubtedly there are locations in our State where, due to local conditions, there may be a much higher incidence of ragweed. Each city and town in Florida should make a survey to determine whether ragweed is present or not. A campaign of eradication should then be carried out, commencing on that side of the city from which the prevailing winds blow. It must be literally a work of eradication, pulling up plants by the roots. Hoeing down the weeds merely prunes them and they will sprout again with renewed vigor.

In Miami it has been found that the pollination season of this plant is more than a month earlier than in northern Florida. While we can safely invite visitors to come to Miami during the regular hay fever season, we desire for the sake of our residents and guests to eradicate as nearly as is humanly possible all ragweed from our midst. The danger of its being introduced by muck and marl soil brought in for city gardens is ever present. A campaign of eradication by a crew of men specially trained has freed eighteen and one-half square miles of Miami's territory entirely. We mean to rid the city entirely and to be able to say truthfully that we are ragweed free.

Conclusion

1. Ragweed has an important bearing on public health, because during two months of the year it pollutes the atmosphere, screening off the ultra violet rays of the sun, producing irritation of the respiratory tract, and causing in perhaps one to one and one-half per cent of the population, a malady known as hay fever or hay asthma.

2. While in the territory east of the Rocky Mountains, containing nine-tenths of the population, ragweed grows in greater or less profusion, in certain areas like eastern and southern Florida it is practically negligible. This section offers the most easily accessible part of the country to which sufferers can flee.

3. Each locality should make a careful survey to determine the presence of ragweed and a campaign of eradication should be instituted to bring to the lowest possible incidence this truly annoying and noxious weed.

BUREAU OF VITAL STATISTICS
Stewart G. Thompson, D.P.H., Director

Total Births by Color and by Counties, Florida, 1936

COUNTIES	BIRTHS		
	Total	White	Colored
0. State	28,084	19,753	8,331
1. Alachua	666	351	315
2. Baker	144	112	32
3. Bay	472	390	82
4. Bradford	173	143	30
5. Brevard	185	122	63
6. Broward	458	232	226
7. Calhoun	210	178	32
55. Charlotte	51	41	10
8. Citrus	96	70	26
9. Clay	84	57	27
62. Collier	56	42	14
10. Columbia	317	184	133
11. Dade	2,980	2,314	666
12. DeSoto	162	142	20
56. Dixie	128	88	40
13. Duval	2,801	1,922	879
14. Escambia	1,203	945	258
53. Flagler	35	14	21
15. Franklin	134	89	45
16. Gadsden (Ex.)	557	204	353
State Hospital	7	7	0
64. Gilchrist	118	103	15
57. Glades	52	44	8
65. Gulf	67	42	25
17. Hamilton	220	132	88
58. Hardee	181	160	21
63. Hendry	46	44	2
18. Hernando	112	78	34
59. Highlands	198	149	49
19. Hillsborough	2,428	2,024	404
20. Holmes	363	353	10
66. Indian River	173	126	47
21. Jackson	833	499	334

BUREAU OF VITAL STATISTICS

Total Births by Color and by Counties, Florida, 1936—(Continued)

COUNTIES	BIRTHS		
	Total	White	Colored
22. Jefferson	318	65	253
23. Lafayette	87	79	8
24. Lake	432	310	122
25. Lee	289	246	43
26. Leon	534	184	350
27. Levy	206	132	74
28. Liberty	83	53	30
29. Madison	401	203	198
30. Manatee	333	205	128
31. Marion	595	317	278
67. Martin	74	54	20
32. Monroe	193	144	49
33. Nassau	153	88	65
34. Okaloosa	288	267	21
54. Okeechobee	59	47	12
35. Orange	852	648	204
36. Osceola	145	111	34
37. Palm Beach.....	817	514	303
38. Pasco	195	168	27
39. Pinellas	841	637	204
40. Polk	1,481	1,157	324
41. Putnam	333	198	135
42. St. Johns	357	241	116
43. St. Lucie	179	109	70
44. Santa Rosa	379	328	51
60. Sarasota	200	136	64
45. Seminole	392	182	210
46. Sumter	200	134	66
47. Suwannee	369	228	141
48. Taylor	197	150	47
61. Union	126	99	27
49. Volusia	642	428	214
50. Wakulla	95	53	42
51. Walton	274	238	36
52. Washington	255	199	56

BUREAU OF VITAL STATISTICS

Total Deaths by Color and by Cities, Florida, 1936
Cities 100,000 and Over Population

CITIES	DEATHS		
	Total	White	Colored
Jacksonville	2,207	1,098	1,109
Miami	1,649	1,196	453
Tampa	1,316	968	348

Cities 10,000 to 100,000 Population

CITIES	DEATHS		
	Total	White	Colored
Daytona Beach	289	208	81
Ft. Lauderdale	179	118	61
Gainesville	237	142	95
Key West	163	123	40
Lakeland	334	274	60
Orlando	545	420	125
Pensacola	566	347	219
St. Augustine	219	120	99
St. Petersburg	891	758	133
Sanford	155	76	79
Tallahassee	174	84	90
West Palm Beach	436	239	197

Cities 5,000 to 10,000 Population

CITIES	DEATHS		
	Total	White	Colored
Bartow	159	108	51
Bradenton	92	74	18
Clearwater	143	119	24
Coral Gables	74	74	0
DeLand	121	89	32
Ft. Myers	152	116	36
Lake Worth	56	56	0
Miami Beach	174	173	1
Ocala	208	102	106

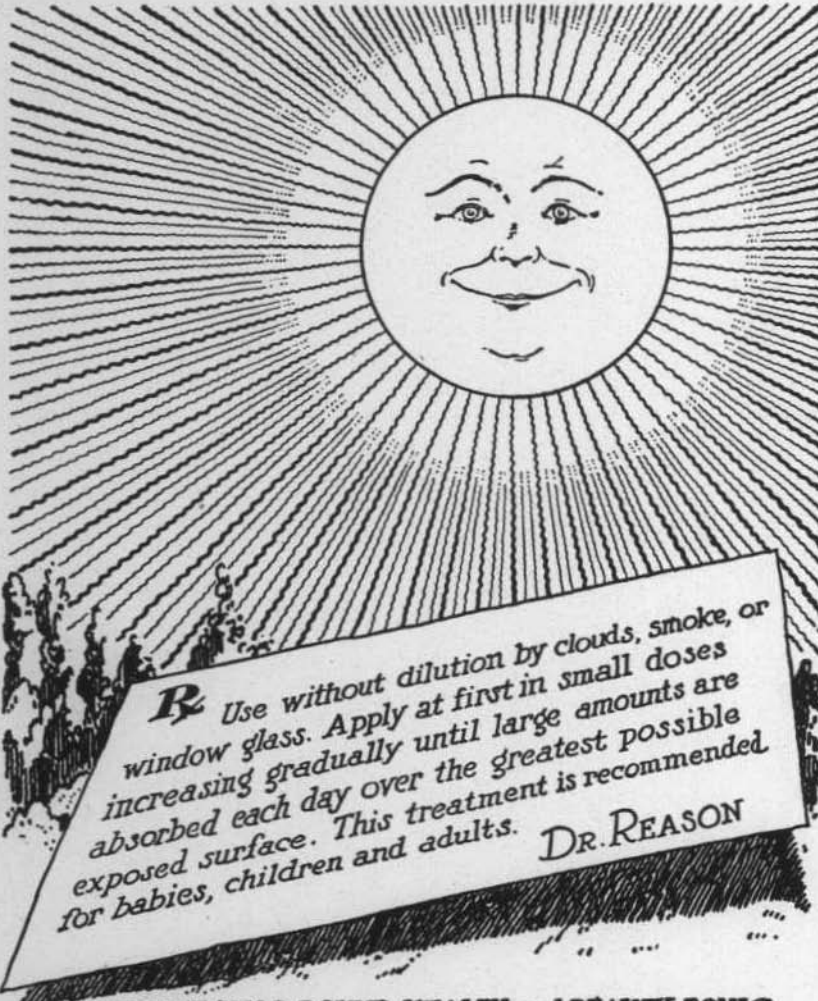
BUREAU OF VITAL STATISTICS

Total Deaths by Color and by Cities, Florida, 1936—(Continued)
 Cities 5,000 to 10,000 Population—(Continued)

CITIES	DEATHS		
	Total	White	Colored
Palatka	176	108	68
Panama City	99	77	22
Plant City.....	92	61	31
River Junction (Ex.).....	13	9	4
State Hospital	343	215	128
Sarasota	135	98	37
Winter Haven	80	69	11

Cities 2,500 to 5,000 Population

CITIES	DEATHS		
	Total	White	Colored
Apalachicola	56	26	30
Arcadia	79	62	17
Avon Park	57	44	13
DeFuniak Springs.....	50	33	17
Eustis	37	28	9
Fernandina	41	17	24
Ft. Pierce	75	43	32
Haines City	30	17	13
Hialeah	18	16	2
Hollywood	42	38	4
Kissimmee	69	54	15
Lake City	250	127	123
Lake Wales	42	29	13
Leesburg	101	75	26
Live Oak	43	24	19
Manatee	77	57	20
Marianna	72	48	24
Melbourne	41	30	11
New Smyrna	77	52	25
Palmetto	40	7	33
Perry	22	10	12
Pompano	41	12	29
Quincy	80	46	34
Sebring	64	50	14
Tarpon Springs	57	42	15
Wauchula	50	47	3
Winter Park	53	37	16



R Use without dilution by clouds, smoke, or window glass. Apply at first in small doses increasing gradually until large amounts are absorbed each day over the greatest possible exposed surface. This treatment is recommended for babies, children and adults. **DR. REASON**

THE BEST YEAR-ROUND HEALTH and BEAUTY TONIC.

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HEALTH NOTES

OFFICIAL MONTHLY BULLETIN

ESTABLISHED JULY, 1892

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JACKSONVILLE, FLORIDA

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Edited by
GEORGE GROSS

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ADMINISTRATION — *McPhaul*
VENEREAL DISEASE — *McCreary*
DENTAL HEALTH EDUCATION — *Geiger*
ANTI-TUBERCULOSIS PROGRAM — *Logie*
NURSING IN THE FLOOD AREA — *Mettinger*
SWIMMING POOL SANITATION — *Safay*

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Jacksonville, Florida

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CONSULTANT IN ENTOMOLOGY

Orlando.....	W. V. King, Ph.D. (U. S. Bureau Entomology)
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ADMINISTRATION**W. A. McPhaul, M.D., State Health Officer****DR. THOMPSON RESIGNS**

The recent resignation of Dr. Stewart G. Thompson, director of the Central Bureau of Vital Statistics and Editor of *Health Notes*, was regretfully received by members of the State Board of Health who were unanimous in their commendation of Dr. Thompson for his nineteen years of tireless effort in behalf of the public health program in Florida.

Dr. Thompson tendered his resignation to the board only after the Florida Medical Association unanimously requested his full time services as managing director.

In 1918, when Dr. Thompson first came with the board, the personnel of the bureau consisted of four girls. Today there is an office personnel of seventeen and a permanent field staff of two. In addition to the full time workers there are 500 local registrars throughout the State who act on a part-time basis.

The first annual report on State-wide Vital Statistics was compiled by Dr. Thompson for 1916 and there is now on file complete annual reports for twenty years. In 1919, Florida was accepted into the Death Registration Area of the United States and in 1924, into the Birth Registration Area. To be accepted into federal recognition, a State must undergo a test to prove that more than 90% of the births and deaths are registered.

During the past nineteen years, there were 540,366 birth and 353,262 death certificates filed, indexed and housed in the fire-resisting vault of the department. More than 10,000 certified copies are issued annually from the records in the Bureau, used for inheritances, proving death for insurance, passports, etc.

In 1921, the Vital Statistics Reporter, which was published by the Bureau, was discontinued and Dr. Thompson was named Editor of the Florida *Health Notes* which has been published continuously since that date.

In 1925, Dr. Thompson was Chairman of the Vital Statistics Section of the American Public Health Association and succeeded himself for Chairman the following year. The A. P. H. A. is the largest health association in the world.

In 1929, the Florida Public Health Association was organized and Dr. Thompson was elected Secretary and Treasurer and has continued to hold that office ever since.

In 1929, a law was passed providing for the filing of delayed certificates. This proved to be a very important statute and a number of other States have copied the Florida law to take advantage of protecting their records when filing birth or death certificates after a period of years has elapsed since the date of birth or death.

ADMINISTRATION

In 1930, the Vital Statistics Bureau outgrew its quarters in the State Board of Health building and it was not possible to house the records and employees there. The Bureau was, therefore, moved to the Florida Theatre building and has occupied the entire fourth floor of that building since then.

In 1934, Dr. Thompson was elected President of the American Association of State Registration Executives.

On August 2, 1935, Honorable Daniel C. Roper, Secretary of Commerce, Washington, D. C., appointed Dr. Thompson a member of the Advisory Committee to the United States Bureau of the Census. At the request and expense of this bureau, Dr. Thompson has been called to Washington on various occasions as counselor in connection with Vital Statistics.

Prior to accepting the position as Director of the Florida Vital Statistics Bureau, Dr. Thompson was with the State Board of Health of Kansas for seven years. During his service in Kansas, that State was accepted into the United States Registration Area for both births and deaths.

The board members and personnel of the State Board of Health take this opportunity in extending to Dr. Thompson their sincere appreciation for the services he has rendered in the past and to wish him every success in his present undertaking.

BUREAU OF COUNTY HEALTH WORK

A. B. McCreary, A.B., M.D., Director

The idea of publicizing Venereal Disease is not new. In many States campaigns were put on to acquaint the public with the dangers of syphilis as well as other venereal diseases. The following article was taken from a bulletin published by a County Health Department in North Carolina in March, 1929:

VENEREAL DISEASE

"Chancroid, Gonorrhea, Syphilis, Again let us warn you." Avoid quacks and quack remedies, see your family doctor, and do not wait for complications to develop. These diseases are no respectors of persons. They are found in the mansions as often as they are in the hut. A free clinic is conducted at the Court House every Thursday for indigent patients, who are approved by the Welfare Department. More than 100 treatments per month are given.

Are you sure that your colored employees are free from Syphilis, why not make them take a Wasserman test? Syphilis is contagious, are you sure your cook, maid or handy man does not have Gonorrhea? We have a record in this department of three children under six years of age

BUREAU OF COUNTY HEALTH WORK

that contracted gonorrhea from the nurse. One of them was a little boy one year old; these diseases can be transmitted in many ways. Satisfy yourself that your children are safe from the carelessness of an infected nurse.

You should be as careful as the hotels and restaurants. Their cooks and waiters must be examined every six months, and are not allowed to work unless they have a health certificate. The city of Hamlet requires its butchers and dairymen to have certificates. And it is only a matter of time until Rockingham will join its close neighbor in this progressive move. Many of Rockingham's citizens are now getting grade A milk which comes under the Hamlet inspection. Examination of hotel and restaurant employees in 1925 showed that 40 per cent were infected with syphilis. We can assure you that no such conditions exist now among food handlers in public eating places, and unless you know your cook is free from disease by test, you are safer in a restaurant than you are in your own home.

The colored race has a great tolerance for syphilis and many of them frequently have the disease for years before becoming aware of it. Within the past four years, four inmates of the county home died as a result of syphilis. They received treatment too late for it to be of much benefit. We often find cases in the third and fourth stage of the disease. Had they received treatment earlier they would not be a burden on the State and county. It is estimated that 30 per cent of the cases in the various mental hospitals are victims of syphilis.

To the individual whose luck is as bad as his conduct, we urge that he see his family physician early. Do not depend upon the quacks or quack remedies. Don't go to the druggist about it, he is NOT competent to prescribe for you, even if he has had the same disease; his business is to fill prescriptions, not to write them. Go to a reputable physician. Gonorrhea is only difficult to cure because of lack of cooperation on the part of the patient.

They get the idea they are well after a few weeks' treatment. Nothing could be farther from the truth. A case that receives treatment at the onset cannot be considered cured under three months' time, and that means if he cooperates. If he does not cooperate, he gets a post gonorrhea, attended by vesiculitis, prostatitis, balanitis, epididymitis and sometimes causes a systemic toxemia with vegetations on the heart valves. Gonorrheal rheumatism commonly follows chronic prostatitis. The germs may be latent in the prostate gland for years, the individual thinking he is well, only to later learn that he has infected his wife. The consequences in the female are even more serious than the male, as the infection eventually lodges in the fallopian tubes and ovaries, producing salpingitis, oophoritis and sterility. Fully 50 per cent of the pelvic operations on women are due to this disease.

BUREAU OF COUNTY HEALTH WORK

Is it worthwhile to curb these diseases? Experiences of the past five thousand years show that fear of disease is little or no curb on conduct. A better knowledge of sex and sanitation on the part of the public will do more to stamp out these loathsome diseases than any other method.

If one intends to be a roue he should at least learn to protect himself, and thereby protect others. There has always been a veil of secrecy and darkness about venereal problems and it is difficult to fight anything in the dark. It must be brought to the light of human intelligence and an honest effort made to further its solution. "Knowledge is Power" and eternal vigilance is the price of safety!

SEX PROBLEMS

Parents! These matters should be explained to your children, and by you! It is far better for you to give them the facts than to have them believing the sensual stories of misinformed companions. How many of you parents gave gone to your family physician for advice regarding this very important subject? If not, why not? Don't get the idea that you have to be indisposed before calling on him. Go to him for advice and then pay him for it. Don't take up 30 minutes or an hour of his time, and just say thanks.

You get legal advice from a lawyer and you expect to pay him, and the chances are that the advice you get from your doctor will be of more value to you, because of its relationship to your mental and physical well being. No, don't expect to worry the health officer with problems you should take up with your family physician.

The county and State employs attorneys at law, and you don't expect them to take up their time discussing your personal matters of legal aspect. He is working for the whole people. So is the health officer. The Health Department is glad at any and all times to give you such information it may have relative to public health and public improvement, but your personal ailments and personal affairs should be taken up with your family doctor."

BUREAU OF TUBERCULOSIS

A. J. Logie, M.D., Director

ANTI-TUBERCULOSIS CAMPAIGN

We hear and read much about anti-tuberculosis campaigns and often are at a loss to fully comprehend the necessity and importance of such a movement. The aim of any anti-tuberculosis program, it may be said, is based on two essential principles: one, the prevention of the disease, the other, its treatment. Under the first, the attempt is made to prevent

BUREAU OF TUBERCULOSIS

the spread of the tuberculous infection among the people; under the second, every effort is made to stay its progress among those already infected.

In order to attain the former objective, that is to say the fight to prevent infection, it is necessary first of all to discover the open case. Next, it is necessary to give these individuals training and education in the methods whereby they, themselves, may avoid spreading the infection among those with whom they might be in contact. Of especial importance is it to arrange their isolation from contact with children. This should be complete, if in any way possible, because of the marked susceptibility of children to the disease. In order to reach the second objective, effective care of the sick, it is necessary, first of all, to discover the cases in the earliest stage of the disease and to provide adequate resources to permit of their treatment in a properly equipped sanatorium where they may receive adequate care.

There have been organized numerous bodies and associations for the essential purpose of encouraging tuberculosis control. There is the International Union Against Tuberculosis to which representatives of every nation are invited for the express purpose of comparing the measures taken in the individual nations for control and of deciding upon the best methods of treating with the problem which is world-wide in its scope. Each country has its National Tuberculosis Association. Ours has performed the herculean task of creating an active branch in each state in the country. The state tuberculosis associations, in their turn, have stimulated individual counties to form local groups. The Florida Tuberculosis and Health Association has been the guiding force in the creation of eighteen individual county tuberculosis associations. Through these smaller branches, the handling of the problem becomes localized to the communities. It is through the efforts of these chains of what may be called unofficial organizations that the importance of tuberculosis control was impressed upon the official bodies and with recognition came bureaus and departments of tuberculosis. Therefore, for a wellrounded campaign, it is essential to have cooperation between the three major groups which are so intimately related in their individual aims; namely, the health department which is interested in the prevention of disease, the medical body, for treatment of disease, and the tuberculosis associations which represent the public and act as the intermediary links.

The contacts of open cases of tuberculosis should receive preference in an anti-tuberculosis program. However, since tuberculosis rarely shows itself until it is advanced, many cases will be missed unless special steps are taken to find the disease at an early stage. As the incidence of tuberculous infection in children between ten and twenty years of age is so great, we believe our best approach to the problem is to thoroughly investigate this group. Consequently, the anti-tuberculosis program in Florida will consist of tuberculin testing and X-raying of the chests of all the positive reactors in the high school group. Facilities are limited and the program must be confined to those children in the 7th to 12th grades.

BUREAU OF TUBERCULOSIS

Dr. Kendall Emerson puts the matter very clearly when he states that searching for tuberculosis among apparently healthy children is valuable from two standpoints: (a) the individual welfare of the child and (b) the protection of the public health. (a) Obviously, when a child is found to be infected a careful investigation of his environment is indicated in order to discover whether he is living in contact with an open or suspicious case. By breaking or controlling the contact, a great service is rendered the child; furthermore, much can be done to build up his resistance and to train him in proper health habits. (b) Quite as important is the utilization of a case of first infection or of childhood type of tuberculosis as a clue, by means of which we may trace the whereabouts of active cases of adult type or reinfection type.

In the control of tuberculosis, the household and not the individual patient is the unit. Having knowledge of a case of infection of tuberculosis, it becomes our obligation to search the immediate surroundings of the child for the source of the infection. The search often leads to an obvious open case which menaces the entire community. Sometimes the source reveals a case of tuberculosis disguised as bronchitis, heart disease or asthma. The systematic search for tuberculosis is therefore valuable as a comprehensive case-finding measure.

In Florida we have the advantage of mutual understanding between the medical body, tuberculosis associations, and health department. There are great possibilities for effective control of tuberculosis in this State.

BUREAU OF SANITATION

Fred A. Safay, Director

SWIMMING POOL AND BATHING PLACE SANITATION

Medical and sanitary sciences have proven that bathing places (pools, springs, lakes, beaches, etc.,) are frequently the means of conveyance of infectious diseases and other painful physical disturbances. Swimming pools improperly cared for have been the source of eye, nose, throat and ear infections and bathers who have conducted themselves improperly have frequently become infected.

Because of these facts and in order that control measures might be instituted to protect the bathers, the State Board of Health in 1919 sponsored a bill which was passed by the Legislature. That statute, known as Chapter 7825, Laws of Florida No. 43, is:

"AN ACT Providing for the Sanitation, Healthfulness and Cleanliness of Swimming Pools, Public Bath Houses, Swimming and Bathing Places; Regulating and Granting and Revocation of Permits Therefor from the State Board of Health, Providing for the Inspection of Such Places; declaring Places and Things in Violation

BUREAU OF SANITATION

of This Act to Be Nuisances, Dangerous to Health and Providing for the Abatement of the Same; Making Violations of This Act Misdemeanors; and Providing for the Punishment of the Same."

This act places the control of bathing places directly under the supervision of the State Board of Health. Florida was the second State in the Union to have such an Act passed, and today bathing place sanitation has assumed the proportions of a major public health problem.

In accord with provisions of the above Act, Rule No. 42 of the State Board of Health was drawn by the Bureau and passed by the Board. Under this Rule all public swimming pools and bathing beaches are subject to inspection by Bureau personnel, and as required by law, plans for all pools must be approved by the Board before construction work starts and all pool operators must request and receive a permit before attempting to operate a pool. Permits are issued for operation of swimming pools when requirements specified in Rule 42 have been complied with. Therefore, if it is found that any public swimming pool in the State does not have a permit issued by the State Board of Health it is an indication that the pool does not meet requirements of the Board or is operated in violation to State law. The requirements are not unreasonable but necessary for the safety of the public. Therefore in selecting your swimming pool this summer be sure it is one that displays a permit issued by the State Board of Health for operation.

Attention is also called to the matter of bathing or swimming in surface waters — lakes, rivers and springs. While these are under the supervision of the Bureau permits are not considered for them. Before using any inland body of water for bathing ascertain if it has been inspected and approved by the State Board of Health. These bodies of water, unless properly protected and controlled, are subject to surface drainage and contamination at all times and bathing should only be done in those bodies where detailed sanitary surveys have indicated that the area is not subject to pollution of a serious nature from public sewers, storm drainage or sewage disposal from individual homes, etc. Upon receipt of a request, a representative of this department will conduct the necessary survey of the area surrounding any body of water being considered as a bathing place and, if it is deemed advisable, samples of water will be collected to determine its fitness for such use. At these bathing places bath house sanitation, proper method of waste and sewage disposal, safe drinking water supply and proper drainage are points considered.

Having been assured that the sanitary condition of the pool and appurtenances are satisfactory, that the water in the pool is of a good sanitary quality, properly treated to maintain a safe degree of purity, or supply of water in the pool ample to care for the bathing load, it is felt that the pool can be used by the bather with a definite feeling of security. This is all quite true, yet there is another point that must be remembered and considered when patronizing any pool or bathing place and that is the

BUREAU OF SANITATION

length of time the bather may remain in the water without fear of ill effect. It is a well known fact that prolonged chilling of the body surfaces causes a reduction of temperature and lowers the general local resistance, thus the body temperature is affected by remaining in the water too long and the resistance against diseases lessened. Also the frequent and prolonged immersion of the head gives rise to abnormal presences and disturbances upon the ear and nasal passages. By following the two simple rules given below it will be possible to lower and in many cases prevent entirely the number of cases of eye, ear, nose and throat infections:

1. All bathers should wear bathing caps to protect their ears.
2. No bather should remain in the water more than twenty or certainly not longer than thirty minutes.

To stress the importance of this item we take the liberty of quoting from an eminent otologist, Dr. H. Marshall Taylor, of this city:

"Man is essentially a terrestrial being, and his anatomy and physiology are not modified for a water environment. When man is out of his normal sphere he must understand what limitations Nature has placed on him, and not ignore the fundamental laws that regulate his own being."

If the above will be borne in mind by all bathers during the swimming season, fewer number of cases of ear, throat and nose infections will be reported. Therefore, protect yourself, assist the pool operator by observing the few simple rules for conduct that you will find posted in the dressing rooms or area ways of all permitted pools in the State.

For further information concerning swimming pools or bathing places kindly address Bureau of Sanitation, State Board of Health, Jacksonville.

VACATION TIME — SUMMER CAMPING TIME

Where will your girls and boys go to camp this summer? Are you familiar with the sanitary conditions of the camp they will attend? Is it safe from a public health standpoint? These and many others are questions which you should ask yourself before selection is made of a camp. This department of the State Board of Health is doing all possible to make such camps safe. Before July first practically all of the Scout camps in the State will be rigidly inspected by our District Sanitary Officers. The source of drinking water supply, method of sewage and waste disposal, proper storage, handling and quality of milk and food supply, and proper drainage and protection from insects by screening are points covered by these inspections. Repeated inspections are made during the camping season. You can assist in this camp inspection work by sending in word concerning any camp with which you are familiar and concerning which any question exists. Tourist camps are known and regularly inspected. The vacation camps which operate only for a few weeks or a month require special attention. Help us protect your boys and girls by closely inspecting the camps before they are opened for the season.

BUREAU OF EPIDEMIOLOGY**Dan N. Cone, M.D., Director****HOOKWORM DISEASE****(Ancylostomiasis)**

An animal parasite endemic is in Florida, which means that it is with us continuously and harbored mostly in the damp and rich soil. Very small worms, which live in the small intestines of human beings as their natural home, and mostly inhabit the intestines of children, where they suck blood for food.

The onset of hookworm in a child might be slight ground-itch or the child might swallow the hookworm egg by eating uncooked food, such as fruits, etc., which have become infested from polluted ground, but in either case it might be several weeks before the child shows symptoms of hookworm disease; such as anemia, slight bloating under the eyes, shortness of breath, pale sallow look and general weakness.

It is not necessary for parents to assume the responsibility of deciding whether or not their child has hookworm, just see your doctor or county nurse and send a specimen of faeces to the State Board of Health and they will examine it and report to you free of charge. The laboratory reports for hookworm specimen examinations show that from twenty and as high as fifty per cent of the children from three to twelve years of age, are infected with hookworm. The higher percentage is from rural sections because city children, whose feet are more often protected with shoes, do not become infected with ground-itch so generally. These figures should convince parents of the necessity of the earnest cooperation with the health authorities in fighting this pest.

In rural districts and outer urban sections where there is no water works or sewage systems and the family is supplied with a ramshackled open privy for women and nothing at all for men and boys, one child with hookworm infection is a continuous menace to his sisters and brothers and neighbor's children because he constantly infects the soil around his home each time he goes to stool. These facts should remain clear in the minds of parents. The child infects the soil and the soil infects the child through ground-itch. This becomes an endless cycle, but luckily for the children, parents can break this cycle quite easily by building themselves a sanitary outdoor toilet which conforms to the State Board of Health specifications.

The outdoor toilet can be constructed complete for ten or fifteen dollars and will save any family in one year more than this amount on reduced doctor bills and drug bills. The sanitary toilet does not only help to stamp out hookworm infection, but also helps to prevent fly-carried infections, such as typhoid, dysentery and various forms of diarrhea. The State Board of Health will furnish on application the plans and specifications for these sanitary toilets and send a man to supervise construction of them if requested to do so.

BUREAU OF EPIDEMIOLOGY

The following are a few things for parents to remember to do in co-operating with the health authorities in this fight against hookworm: first — ground-itch is hookworm infection and a disease, treat as such, see your family physician and cure it as quickly as possible; second — have your child examined for hookworm under the supervision of the doctor or county nurse, if infected see that the hookworm medicine is given. The State Board of Health furnishes the medicine free. Third — construct sanitary toilets for your home and talk sanitation and sanitary toilets to your neighbor or share cropper. His back yard might infect your child.

Give your local, county and State health authorities your sincere co-operation. "GOOD HEALTH IS MORE TO BE DESIRED THAN RICHES." Kindly pass this pamphlet on to your friend or neighbor for his consideration.

BUREAU OF DENTAL HEALTH

E. C. Geiger, D.D.S., Director

The puppet show sponsored by the Bureau of Dental Health, in co-operation with The Good Teeth Council For Children, completed a three and one-half months' State-wide itinerary in Key West on May 14th.

This visual education feature has been shown before 92,000 elementary school children, teachers, parents and dentists. This form of educational entertainment has proven valuable because it portrays the four points of Dental Health in an interesting way, eliminating the usual "castor oil" method of teaching a health subject.

Little Jack, star of the puppets, has received about 15,000 letters from children all over the State inviting him back.

The educational psychology is that the puppets entertained as they taught. Each child saw the four points acted out, and they heard them discussed. Next they were required to list the points if they wrote to little Jack, in order to receive a letter from him. Each letter was answered and the four points enlarged upon.

Little Jack's most ardent admirer, perhaps, was a widowed mother of six children. Her letter was unusual and listed, not only the four points, but also a complete description of her deceased husband, and the hour and date of birth of each child.

Little Jack became so well known that letters addressed by children to "Little Jack," Jacksonville, Florida, were received promptly. The schedule for the puppet show included only the outstanding elementary schools in 32 counties, due to limited time.

A weekly radio program is being considered as an ideal medium of reaching large groups of children during the summer vacation months. A test broadcast was recently presented over one station and was received

BUREAU OF DENTAL HEALTH

most enthusiastically. The manuscripts are prepared for child appeal and are entertaining and instructive—the points of dental health being brought into the script at psychological times and not dwelled upon too long. The announcer, however, summarizes the dental health lesson in conclusion, and the educational entertainment plan is proving to be popular with children.

Each feature will be electrically recorded and sent to the key radio stations of the State, who have kindly consented to allot time, gratis, for this public health effort.

BUREAU OF PUBLIC HEALTH NURSING

Ruth E. Mettinger, R.N., Director

The following excerpts are from a report written by Miss Gertrude Douglass, one of the twelve nurses sent by the State Board of Health to the Red Cross for disaster relief work during the recent floods in the Ohio River Valley.

NURSING IN THE FLOOD AREA

“Although I have been a Red Cross nurse for several years not until the recent disaster in the flood-stricken area did I fully realize the extent of the organization’s power. The entire control of activities in this region of desolation, disease and despair was in the hands of the Red Cross, under whose capable direction all local organizations did their work.

“For the multitude of flood victims, who had lost all their property, Refugee Camps were provided. These camps being located in warehouses or other buildings with considerable floor space and sanitary conveniences; the equipment, such as cots, blankets, chairs and kitchen utensils, were loaned or donated by CCC Camps, local organizations and public spirited citizens. Full-time nurses took charge of first aid stations in each camp. In cooperation with the local physicians they provided medical attention for all who were in need of it. Doctors in most cases offered their services free of charge, paying periodic visits to the camps to which they were assigned; seriously ill patients being taken to the local city hospitals or to the emergency wards set up for this purpose.

“My own base having been Henderson County, Kentucky, I am best acquainted with the procedure as carried on there. It was noticeable that here the County Health Department served as the chief functioning body. Public Health nurses had complete charge of the camps; of sanitary arrangements, heating, lighting and ventilation, and of the efficiently-supervised kitchens. They gave vaccinations, inoculations and general nursing care. WPA workers, with the aid of volunteers from among the

BUREAU OF PUBLIC HEALTH NURSING

refugees, took over much of the actual work. Special problems outside the day's organized routine were referred to the Public Health Director to be assigned to other agencies as deemed necessary.

"The confidence placed in the Health Department and reciprocated by the loyalty and cooperation of individuals and organizations of the county was of great satisfaction to me. Obviously the Department is becoming an integral part of the community, as service 'of the people, by the people, and for the people' and is recognized as such."

BUREAU OF LABORATORIES

Paul Eaton, M.D., D.P.H., Director

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF APRIL, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	3672	2235	306	129	610	6952
Diphtheria	467	269	105	386	55	1282
Typhoid	1261	220	56	81	22	1640
Malaria	1257	247	59	42	323	1928
Rabies	78	2	1	1	...	82
Tuberculosis	365	214	57	60	7	703
Gonorrhea	1450	462	172	317	124	2525
Kahn	7127	2381	472	2689	676	13345
Water .....	.....	46	7	192	...	245
Milk	328	300	271	391	161	1451
Miscellaneous ..	1181	47	165	334	36	1763
	17186	6423	1671	4622	2014	31916

Specimen Containers distributed 18423

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	42 Packages
	5,000 units	26 Packages
Schick.....		6290 Tests
Toxoid.....		1925 C. C.
Typhoid Bacterin.....		3544 Treatments
Vaccine Virus.....		3343 Capillaries
Antirabic Virus.....		125 Treatments
P. P. D. Tuberculin.....	100 test pkgs.	10 Pkgs. 1st strength
		9 Pkgs. 2nd strength
P. P. D. Tuberculin.....	10 test pkgs.	43 Pkgs. 1st strength
		39 Pkgs. 2nd strength

BUREAU OF VITAL STATISTICS

The following indicates the number of Deaths from Certain Causes, by Months, for 1937, as compared with the previous year

TYPHOID

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	5	1	7	13										
1936	1	3	1	5	7	5	4	4	6	4	3	0	1	39

DIPHTHERIA

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	3	5	2	10										
1936	5	7	3	15	2	4	0	2	1	3	6	11	13	57

TUBERCULOSIS (ALL FORMS)

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	76	92	90	258										
1936	76	76	86	238	81	71	58	83	60	76	69	81	88	905

MALARIA

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	13	11	9	33										
1936	9	13	11	33	15	23	22	42	48	44	55	45	22	349

CANCER (ALL FORMS)

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	140	100	131	371										
1936	112	135	128	375	116	130	124	109	111	106	134	124	129	1458

PELLAGRA

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	7	9	9	25										
1936	15	9	18	42	15	12	12	13	12	6	8	8	5	133

PUERPERAL STATE

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	21	15	16	52										
1936	22	16	21	59	15	21	15	16	15	17	18	19	21	216

AUTOMOBILE ACCIDENTS

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	88	56	49	193										
1936	61	51	49	161	58	40	54	60	54	48	30	54	86	645

COLLISIONS (R. R. OR ST. CAR WITH AUTO) AND MOTORCYCLE ACCIDENTS

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	4	5	2	11										
1936	4	5	2	11	4	1	2	4	6	3	2	1	4	38

ALL ACCIDENTAL DEATHS (176-198 AND 201-214)

Year	Jan.	Feb.	Mar.	Total	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1937	182	156	142	480										
1936	173	144	146	463	137	112	134	150	122	106	110	148	168	1650

BILL JONES CUTS *the* COSTS



Bill: I don't feel very well this morning, but I can't afford to lose any time at work.



Mrs: If you're sick, you're going to stay home and have the doctor. It'll be cheaper in the end.



Doctor: He has a little fever, — not serious, but you did the right thing in making him stay home."



Bill: I've got to hand it to you, kid! You were right, as usual. It's better to lose a couple of days than take a chance on being really sick for a few weeks.

FLORIDA STATE LIBRARY

F L O R I D A



HEALTH NOTES

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WE HONOR
IN THIS ISSUE



The Hon. FRED P. CONE
Our Distinguished Governor



FLORIDA HEALTH NOTES

Official Monthly Publication of the

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Governor of Florida

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State Health Officer

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VOL. 29

JULY, 1937

No. 7

OUR POLICY

W. A. McPHAUL, M.D., State Health Officer

IT is unfortunate but true that a public agency such as the Florida State Board of Health is forced to be constantly on guard against allowing its name to be connected with private enterprises which obviously seek to further their own ends by such a connection. When such an instance occurs it is the duty of this agency to publicly correct any false impression which might have been left in the public mind.

A case in point is one which recently took place in Mt. Dora and which not only caused this department considerable embarrassment, but relayed an opinion which this agency does not share.

On June 14th, there appeared in the *Orlando Morning Sentinel*, a newspaper story referring to the Mount Dora Hospital located at Mount Dora, Florida. The head of this institution is Gerald A. Richardson, a doctor of osteopathy, who states in the article that free treatments are given in post-natal and pre-natal cases and for venereal diseases. The article appeared later in other State papers.

The article also states that wishing to cooperate with the State Board of Health, a free clinic has been established to give the above

mentioned treatments. We believe that it will suffice to say that the State Board of Health neither sought nor does it desire such co-operation.

The following is a letter which I, as State Health Officer, wrote to the Editor of the *Orlando Morning Sentinel*, and which that paper very obligingly published:

June 15, 1937

Orlando Morning Sentinel,
Orlando, Florida.

Gentlemen:

My attention has been called to an article appearing in your excellent paper, issue of June 14th, which is very much misleading and not based on true facts. The article in question is signed by one Dr. Gerald H. Richardson, Director of the Mount Dora Hospital.

In this article he makes reference and gives much credit to certain members of the State Department of Health, among those mentioned being Dr. Woods, Director of Maternal and Child Health, and Dr. J. T. Googe, Director of County Health Work. Neither Dr. Googe nor Dr. Woods has been connected with the State Board of Health for sometime. He also makes reference to venereal disease clinics, leaving the impression that the State Board of Health is sponsoring a clinic at the Mount Dora Hospital referring the reader to an article on another page.

I desire to state that the State Board of Health does not sponsor nor operate and has no connection whatsoever with any clinic at the Mount Dora Hospital, neither has the U. S. Public Health Service to my knowledge. Furthermore I desire to state that should the State Board of Health contribute or participate in any venereal disease clinic it will be done through and under the auspices and direction of the local medical society of that county.

Trusting you will give this the same prominence you did Dr. Richardson's article and assuring you of my full cooperation, I am

Very truly yours,

W. A. McPHAUL, M.D.,
State Health Officer.

THE HEALTH-MINDED HOUSEWIFE

DAN N. CONE, M.D., *Director*
BUREAU OF EPIDEMIOLOGY

THE health minded housewife, after dressing in the morning, will report to her kitchen or kitchenette and there, in a leisurely way, she will proceed to prepare breakfast for her family. She doesn't hurry because she finds the sink thoroughly clean, dishes, tableware, pans and pots all clean and ready for use. The scraps and particles of food carefully placed in a covered garbage can. This family, after enjoying a well prepared meal on time, because there are no left-over jobs to interfere, begins the day with everybody in a good humor and with their full share of health protection.

Some housewives, in haste to go to the picture show or attend church at night, hurriedly scrape up the crumbs and leave them on the drain-board, pile the soiled dishes and tableware in the sink to be left there until the next morning. This is a real misfortune.

The starchy, sweet crumbs and meat giblets left over for twelve or fourteen hours make a perfect soil for the growth of several varieties of

bacteria, some of which are capable of creating sickness. During the night a few flies and roaches in the kitchen enjoy the nourishment of the left over scraps and perchance the flies may drift into the front room just before breakfast and there take delight in parading up and down the handle of the baby's rattle. Then when the nurse or sister brings the baby from the bed-room, laughing and kicking, the natural procedure is for one of them to pick up the rattle and hand it to the baby. The next natural performance is that baby leisurely puts the handle of the rattle into his mouth, thereby getting a good smear of bacteria. A few days or a week later baby may have an attack of bowel trouble with fever, which could have been caused by the left-over table scraps and soiled dishes.

In your daily routine allow yourself thirty minutes to clean and clear everything after each meal and place all food particles and scraps into a covered garbage container. In this way your home may have a full share of health protection.

GOOD HEALTH HABITS

RUTH E. METTINGER, R.N., *Director*
BUREAU OF PUBLIC HEALTH NURSING

BEFORE we can form good health habits, we must know what constitutes good health; we must know three other things—what to do in order to have good health, how to do it, and why doing these things is important.

What is good health? How can we recognize it? The Health has an erect posture in sitting, standing and sleeping. His skin is clear, firm, free from blemishes—neither too dry nor too moist. His eyes are clear and sparkling, his teeth are clean and free from cavities. He has a good healthy appetite, eats what is put before him and does not play with his food. His

growth in height and weight is steady and does not vary more than ten percent from the standard. He sleeps well and has a sufficient number of hours of sleep for his age. He is entirely free from malformation, abnormal growth, or structural defects. He has proper elimination of body wastes.

After we are able to recognize good health habits, the next thing we want to know is how to achieve the best of health.

Diet is one of the most important elements in good health. Since milk furnishes proteins or body-building materials, it should never be omitted

from a diet, especially a child's diet. It also contains fats and sugars which supply heat and energy and all other elements which are necessary to build bones, teeth and tissues.

While milk supplies all these things, it does not supply some of them in sufficient quantities; therefore, we must add other things to the diet.

Sleep is another factor that is considered essential to good health. Children must have the proper amount of sleep in order to grow at a normal rate. During normal healthy sleep, the body is free not only to mend worn out tissues, but to build new ones. This building of new tissues is called growing. A child to grow properly must have adequate sleep. A happy disposition is hardly possible without enough sound sleep. When a child is naughty, cross, restless, or hard to manage, he is probably physically and nervously tired out.

The importance of correct posture cannot be given too much emphasis, because incorrect posture means more than stooped shoulders or a curved backbone—it means crowding of internal organs which may result in serious illnesses. Some of the causes for wrong posture are excessive fatigue, carelessness, bad eyesight, and foot-arch troubles. School children who have poor posture rank lower in attendance, deportment, physical activity and endurance and

in scholarship than the average of those who have correct posture.

We all know that the greatest period of plasticity is in infancy and early childhood. This plasticity must of necessity result in the formation of habits. Therefore, the earlier good health habits are formed the more lasting they are apt to be. However, if re-training becomes necessary, we should remember that the teacher of children of nursery age has a better opportunity to correct faults than has the primary grade teacher, or even a kindergarten teacher. "As a twig is bent so is the tree inclined," is an old adage.

Professor Whitley of Columbia University states, "There is no doubt that the years before nine are pre-eminently the ones in which to establish good physical habits. The hygienic habits of eating, sleeping at regular periods, of evacuation, habits of cleanliness and tidiness." It necessarily follows that if habits are to be formed, there must be some provision for activity. If a child is to practice brushing his teeth, tooth brush and paste must be provided. If he is to exercise intelligence in the choice of foods, proper foods must be provided. Sufficient hand washing facilities must be available.

As parents, teachers, and nurses, we have a very great responsibility in becoming informed ourselves as to the rules of good health in order that we may give the proper guidance to those in our charge.

WHAT IS PUBLIC HEALTH

A. B. McCREARY, A.B., M.D.

Director, Bureau of County Health Work

FLORIDA STATE BOARD OF HEALTH

PUBLIC Health was born of necessity. It received its inception as an emergency measure on the part of communities for the control of epidemics. It is a child of the medical profession. Organized medicine sponsored public health through the organization of boards of health for the purpose of combatting epidemics and other health emergencies which

arose in the communities. It was perfectly natural that it should occur to those workers in the field that it would be far better to have some permanent organization with power to act, which would be the watch dog and guardian of the communities' health. It was natural that it should occur to the thinkers in the field that possibly the best means of handling

and controlling these emergencies would be to attack the causes along all fronts, rather than call together all the forces at their command for one great and expansive battle, once the enemy was within their gates.

County health work, as it is known in modern public health, consists of an organization under a medical director, comprising registered nurses, trained sanitarians and trained clerical help for the handling of the multiple phases of public health which have been an evolutionary trend of the earlier efforts at communicable disease control.

The ideal set up has been described as the medical health officer, the nurse, the sanitary officer and the clerk, serving a population of 25,000 or 30,000 people.

The work of the health department may be divided into five divisions. Just to enumerate the functions, activities and duties of a full time health unit, we might start by stating:

(1) That the collection, classification, compilation and analysis of vital statistics is very important. No good business man would contemplate the organization of a business firm without first making a thorough study of the field, the business prospects, the amount of merchandise necessary for the handling of business, as well as the demand, and the ability of the people to pay for the product. A competent health department first surveys the needs of the community. The Department of Vital Statistics, which is a branch of the health service, tabulates births, deaths, morbidity, marriages and divorces, as well as other necessary data regarding the population of that community. The figures which show the birth rate, the infant death rate, the specific death rate from various communicable diseases and sundry other causes are valuable in giving a life index for the community. The study of these figures enables the health department to know what the greatest needs are in that community and to apply recognized corrective measures to such conditions.

(2) Health Education and Hygiene: This phase of the work constitutes the educational work that is being done by the department in teaching to expectant mothers the proper care of themselves and their baby, and further in cooperation with their family physicians, stressing to them the proper care of their child and at all times urging that this mother avail herself of competent medical care at the time of her baby's birth. At one time during the history of public health, the ages from one to six were the forgotten ages of childhood, as too frequently health departments laid stress upon an infant and maternal hygiene program and upon a school program without giving any consideration whatsoever to those important formative years covered from one year of age to six years of age, before the child enters school.

The health department, at the present, recognizes the necessity of having these children under the care and supervision of their family physician during these ages, which are so frequently fraught with grave danger to the child from communicable diseases and to the fact that many of the necessary corrections to fit the child for a useful citizenship may be made with the minimal effort and the maximal results during this period. The child enters school at six and comes under the attention of his teachers in the school, and of the health department through the school physician. The health department simply examines the child in an attempt to find defects or conditions which will retard the child in its school work. The Government has an investment in its schools and in order to get the most from this investment, the child must be physically able to get the most from his school career. The sick child cannot do the work of the healthy child. Therefore, the work of the health department in the schools is educational, just as the primary motive of the school itself is educational. The health department finds these defects and calls the attention of the parents to

the defect and urges that the parents take this up with the family physician and have the defects corrected. If these defects can be corrected during that five-year period, which we have spoken of as the forgotten age, then the child can enter school, and go through school with no physical handicaps. It does not stop merely with the school child but adult hygiene attempts the education of those beyond the portals of the school house. By no means be willing to accept the old adage that "you cannot teach an old dog new tricks." We do know that people who have reached adult life are not only able but anxious to learn many truths that will react to their best interest, conserve their health and prolong their lives. We have learned from industrial corporations the value of periodic examinations. The Insurance Companies were among the first to see that it was to their own interest (call it selfish interest if you so desire) but nevertheless it was to the interest of the policy holder. With this in view the Insurance Companies insist and urge that their policyholders take annual physical examinations for which the Insurance Companies pay. The Insurance Companies have recognized that it is economical to keep the policyholder healthy so that he may pay the premium for many years longer than he probably would be able to if the first indications of some of the degenerative diseases had not been found through these physical examinations and the patient shown how to prolong his life.

(3) Under the Bureau of Epidemiology or Bureau of Communicable Diseases, comes the management of those diseases which are considered as contagious and infectious. Many of these diseases are known to be preventable, and, in many instances, the means of prevention are simple and easy and require more than anything else, a knowledge on the part of the public so that their cooperation may be gained in the control of disease.

One rarely goes into a picture show in Florida that they are not

treated with a symphony of whooping from children in the audience who have whooping cough. We feel that if these parents realized that whooping cough is considered one of the killers in Florida, and that more lives have been claimed by whooping cough within the last few years than by diphtheria or scarlet fever, we feel that the parent would be more cooperative and not feel that whooping cough was some simple condition which was not worthy of notice. Then we feel that the parent would be more concerned with the welfare of her neighbor's child, and not desire to take this child out to public places where he could further strew the germs of the disease, as well as exposing the sick child to the elements, and possible complications, which in turn may cost the child its life. We feel that if these parents knew the facts, then their cooperation could be more readily counted upon, with the ultimate result that through education, a healthier community, a healthier county and a healthier state might be achieved.

Education is mightier than legislation. If it were not for the fact that the public is already educated to know that a red light on a highway signifies danger, the chances are that the individual would drive right through the red light into an open bridge or whatever hazard might be beyond the warning signal. Public health authorities and organized medicine have long held the danger signals before the people regarding disease. Many have learned them, many have heeded them and have been rewarded thereby, but the general benefit of widespread education along this line has been denied the public in many instances, because of inadequate health set-up in many places.

(4) The fourth function of a health department, we will term as the laboratory which, in many instances, is looked upon as a branch or an arm of the Bureau of Epidemiology. The two departments are very closely coordinated. In many instances, the epidemiologist must

depend upon the findings of the laboratory for confirmation of the diagnosis. Proper communicable disease control methods are based upon accurate diagnosis. The epidemiologist can neither institute the proper control measures nor can a physician properly treat the case unless he knows the diagnosis. When the epidemiologist is assured of the diagnosis, he seeks to find the source of the disease, to eliminate the source of the disease, and the further spread of the disease among the people of the community. His work is prevention, as is all health work, and it is the duty of the private practitioner to render treatment to the unfortunate individual who has the disease.

(5) Sanitation: Under sanitation will be included proper sewage disposal; proper garbage disposal; pure and adequate water supply; pure, wholesome and safe foods.

It is the duty of the Bureau of Sanitation to supervise all food handling and food handlers to assure the public of a safe food supply.

We recognize that without sanitation, our modern cities would have been impossible. The modern sewage systems, the modern handling of oysters, meats and other perishable foods, the modern filtration plants and the modern delivery of water, were necessary to the proper sustenance of the race in closely crowded communities.

We recognize that many communicable diseases are traced to improper sanitation. We know all the alvine discharge diseases such as typhoid fever, dysentery, hookworm and others are too frequently traced to the improper disposal of sewage. Occasionally they may be traced to some careless carrier of the disease who is handling food. It is the duty of the health department to see that such an individual does not work with food.

We know that many diseases like diphtheria, poliomyelitis and meningitis are too frequently spread by the medium of common eating and drinking utensils. In altogether too

many places no sterilization of the implements is practiced. We know that we may be unfortunate enough to order a drink in some establishment immediately after a tuberculosis patient, a syphilitic with an open lesion on his lip, or a diphtheria carrier has just been served, and we may be so unfortunate as to be served in the same glass which has only been doused in a tub of filthy water, then sprinkled with cold water and our drink immediately served in it. Then, we wonder why we have epidemics. One of the best inspectors in the world is an informed public that knows what to demand and why. This would be one of the duties of a health unit, through its bureau of sanitation to see that all food handling establishments serve only pure food and pure liquid, and that the food was served in clean, properly sterilized utensils and by clean, healthy waiters, who had medical health certificates attesting to their sound health. The impossibility of rendering such service to a community through a district health department with too meager personnel to handle the wide boundary and the great population is obvious. A full time health unit in the average county may render the type of service which that community should have. Such a set up would be in position to adequately study the needs of that jurisdiction and institute the corrective measures which are necessary.

No one would expect the Road Department to build a private road through someone's premises. Should that individual desire such a road, it would be his own responsibility to create it. The Road Department is working for all the people. No one would expect the Fire Department to rebuild a structure which has burned down, yet the Fire Department has rushed out valiantly and topped the further progress of the destructive process. The rebuilding of the damage already done by the fire would become the obligation of the owner of the property and not the obligation of the general public.

Counties and municipalities employ attorneys to look after the legal business of that unit of government. This attorney is employed by, and is working for the whole people of that community and not for an individual. One would not expect to go to the county attorney and request that he represent them in a private matter before the courts simply because he was the county attorney, on the plea that one was a taxpayer.

It is too bad that there are persons who sometimes get the idea because the health officer is a physician that he should look after their needs simply because he is employed by the community to look after the health of that community. The community is the health officer's responsibility and the individual patient is the responsibility of the private practitioner, and it is the responsibility of that patient to pay the practitioner for that service just as the county pays the health officer for his service.

The sole function of the health department is prevention, not treatment, and it is obvious that the health department will have its hands full properly attending to the duties that rightfully belong to it without attempting to encroach upon a field where it has neither the intention nor the desire to encroach.

Too frequently people have the mistaken idea that a health department is an agency set up as a unit of government for the treatment of indigent patients, and where such indigent patients have received a form of treatment through the health set-up, the department is frequently imposed upon by some people who are able and who should pay their family physician for such services. It should appear obvious that it would be a physical impossibility for the health officer to render medical service and treatment to the people of such a wide area, and that he should attempt same, he must do it at the expense of the legitimate service and protection to which the community is entitled, and it should further appear obvious that to set up machinery for the treatment of patients would

mean a financial drain upon the resources of the community to maintain an adequate corps of physicians, but the health set-up as described above can easily render to such a community adequate health protection.

It is necessary that the health department work in harmony with the physicians of the community. The physicians sponsored public health and gave it its very life. The necessity of the department working with, and in cooperation with the physicians of the community is essential. It is the practicing physicians who see communicable disease and who first report it to the health department. It is the practicing physicians to whom not only the public goes for council but oftentimes the public health department as well, and it is the practicing physicians who have always stood solidly with the health department for the advancement of the public interest. It might be said, and it is frequently said, "It seems funny that the doctors should be working against their own interest." After all when a man gets a communicable disease and dies, he is no longer the doctor's patient, but through an educational program advanced by competent ethical health officials, the doctor's revenue should be increased by the amount of persons sent to him for correction and the public should find more abundant life thereby. However, it is also true that the medical profession in an altruistic manner has struggled and fought to conquer disease. It has been through the efforts of the medical profession that practically all of the great discoveries for the prevention and control as well as the cure of disease, have been found.

The duties of a public health department might be included within the scope of four words: Educational, advisory, investigatory and legal, and undoubtedly, the greatest of these is education, and the educational work in the art of living is one of the greatest services rendered by any health department, and would be the means of leading that community to a healthier, happier and fuller life.

MOTTLED ENAMEL

E. C. GEIGER, D.D.S., *Director*

DIVISION OF DENTAL HEALTH

MOTTLED enamel is a condition of the secondary teeth of human beings presenting an opaque, whitish, chalky appearance in the moderate cases, and unsightly discoloration in the more severe cases. This is due to fluorides in drinking water and prolonged use by growing children. As little as 1.0 per million of fluorine in a drinking water supply will produce this condition.

In many cases the whole tooth surface presents this dead white, unglazed appearance, yet others will show paper white patches distributed over the surface. The teeth glare unnaturally when the mouth is opened because of the loss of the normal translucency. Frequently the enamel is badly pitted and corroded and the teeth are structurally weak, the enamel tending to chip off.

This condition must not be confused with a somewhat similar effect which is produced by such diseases as scarlet fever and chicken-pox contracted during the formative period of the teeth.

Mottled teeth may or may not become stained later. The upper front teeth usually present more discoloration than the other teeth. The general tendency is for the stain to follow the lip line, suggesting that exposure to light is a factor in its production.

The moderately severe and severe types present crowns with brown flecks, striations, and even pits. The first teeth are rarely affected due to the fact that these teeth begin to form before birth; even though the expectant mother consumes water containing 6.0 P. P. M. Fluorine. This element does not pass through the maternal placenta to interfere with the calcification and formation of the baby teeth; however, these teeth may not be calcified until later in some cases. The secondary teeth begin to form soon after birth, usually about two or three months after birth,

and continue until ten to twelve years of age. During this period the child is susceptible to mottled teeth from drinking water containing Fluorine.

Unfortunately the aesthetic problem of mottled teeth is not the only concern. The enamel covering the crowns of teeth is composed of hexagonal rods which lie side by side, perpendicular to the surface. They are held together by an intercementing substance, whereby the enamel derives its inherent strength and density.

The consumption of water containing 1.0 P. P. M. of Fluorine, or sometimes even less, prevents the formation of this intercementing substance during calcification; this accounts for the chalkiness and even pitting of the enamel, the discoloration being due to the concentration of fluorides and precipitation upon exposure to light.

The calcium and phosphorus intake through diet, metabolic rate, and various physiological factors may determine the severity of the condition in various children's mouths even though the same amount of Fluorine is consumed. The accumulation of Fluorine may result from sources other than water supplies, considering the use of fluorides in fruit and vegetable sprays, fertilizers and as a preservative of dried fruits. Fluorine affects the enamel only during the period of calcification and teeth are not subject to this condition after formation is complete.

Mottled enamel or Endemic Dental Fluorosis is an important unsolved problem of Public Health, and may rightfully be called a modern plague. Experiments have shown that a rat fed on a diet containing Sodium Fluoride does not reach the same skeletal size and development of his litter mate who does not consume fluorides. The long bones of cows were found to contain Fluorine and possessed a

mottled appearance when raised in an endemic area. Therefore the dental social and economic aspects are not the only concern.

It is not uncommon for a victim of mottled enamel to lose his teeth by the age of thirty-five. Why, if the cause is known, isn't mottled enamel or chronic endemic Fluorosis preventable? It is. If every community in the endemic area could change its water supply to a source in which no fluorides are present, there would be no further development of the condition. Obviously, this is impossible of accomplishment. If the offending waters are from well supplies, the cost of changing the supply may be practically prohibitive.

Since change in supply is not generally possible, methods of water treatment must be investigated to lower the fluorine content either below the toxic limit, 1 P. P. M., or to prevent the effect in persons whose only source of drinking water is known to be toxic.

Various methods of chemical treatment have been tried, but a practical method has not been found. On the other hand, investigators have shown that if aluminum chloride is fed to rats, mottled enamel will not result even if there are high concentrations of Fluorine in the diet. If the human digestive system can duplicate that of the rat in fixing the fluorides the problem may be solved.

ANTI-TUBERCULOSIS PROGRAM

ARTHUR J. LOGIE, M.D., *Director*

DIVISION OF TUBERCULOSIS

FOLLOWING the invitation of the county medical society, the Anti-Tuberculosis Program, sponsored by the Division of Tuberculosis of the State Board of Health was introduced into Taylor County. The work was carried out under the auspices of Dr. O'Quinn, the director of the Taylor County Health Unit and his personnel. Through his department the children were grouped, recorded and scheduled for tuberculin testing. Through the participation of the local physicians of the county, the County Health Unit, and personnel of the Division of Tuberculosis, the tuberculin tests were given to every child throughout the county from the seventh to twelfth grades, whose parents had consented to the test. Those children who were negative to the first test received the second one. After the testing had been completed,

the skin reactions were read in forty-eight hours.

Along with this high school program were included, upon the requests of the local physicians, a number of school teachers, colored domestic employees, contacts and suspected cases.

After all tuberculin reactions were interpreted, the positive reactors were listed for X-rays of the chest. On June 1, the X-ray Field Unit, under the direction of J. W. Morehouse, X-ray technician with the State Board of Health, visited Perry. The X-ray apparatus was set up in the Perry high school, to which all the positive reactors who had been listed for X-ray were transported. Everything had been arranged in a systematic and orderly manner so that the work was completed within a few hours.

In Taylor County, there are approximately 700 white and colored child-

ren, varying in age from 14 to 18 years in the seventh to twelfth grades. The tuberculin test was given to 571 of these children, 468 being white, and 103 being colored. Of the 571 children, 149 or 26.17% showed a positive reaction to the test. The percentage of positive reactions was greater among the colored group as compared with the white children. Chest X-rays were made of 143 positive reactors; six having refused X-rays

In the group who were requested to be included in this program by the local physicians, there were 128 adults. Of the 128, 63 or 42.2% reacted positively to the tuberculin test. X-rays were made of 51 of the positive reactors; the other 12 did not appear.

We have not as yet attempted to make a statistical study of this data but in the near future we expect to publish a comparative study of the various counties visited. However, from these findings, we can say that in Taylor County the incidence of tuberculous infection in children lies

within the normal limits, that the incidence is greater among the colored children; that many adults pass through childhood and reach adolescence free of infection with germ of tuberculosis.

Through this program, we are able to investigate a county thoroughly and "weed-out" those individuals whose tissues have been invaded by the germ so that they may be under observation for a prolonged period. This will enable an early diagnosis of tuberculosis to be made as soon as any signs make their appearance. Those who have been exposed to "open cases" (contacts) are investigated for the presence of the actual disease. The reports of the disease and X-ray findings are sent to the family physician named by the family. This places the possible case under the supervision and guidance of his own physician. In this manner, the bacillus carrier is discovered and the diagnosis of early tuberculosis is assured to the infected individual's benefit and to the public's safety.

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF JUNE, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	2170	994	223	143	198	3728
Diphtheria	543	203	73	159	25	1003
Typhoid	1492	258	89	85	35	1959
Malaria	1564	554	146	39	283	2586
Rabies	57	5	1	..	..	63
Tuberculosis	298	218	55	64	100	735
Gonorrhea	1220	430	226	310	138	2324
Kahn	8231	2652	763	2557	599	14802
Water	..	82	35	233	2	352
Milk	247	316	478	239	8	1288
Miscellaneous	1164	81	210	395	48	1898
	16986	5793	2290	4224	1436	30729
Specimen containers distributed						14191

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria	10,000 units	35 Packages
Antitoxin	5,000 units	6 Packages
Schick	..	500 Tests
Toxoid	..	824 C. C.
Typhoid Bacterin	..	4276 Treatments
Vaccine Virus	..	1355 Capillaries
Antirabic Virus	..	99 Treatments
P.P.D. Tuberculin	100 test pkgs.	5 Pkgs. 1st strength 5 Pkgs. 2nd strength
P.P.D. Tuberculin	10 test pkgs.	24 Pkgs. 1st strength 23 Pkgs. 2nd strength

ALL REQUESTS FOR BIOLOGICALS SHOULD BE DIRECTED TO THE STATE LABORATORY, STATE BOARD OF HEALTH, JACKSONVILLE, FLORIDA.

DRAINAGE WELL SANITATION

FRED A. SAFAY, *Director*

BUREAU OF SANITATION

THE practice of disposing of excess surface water, sewage and storm water into the underground strata and the utter disregard to the pollution of the underground waters of the state has been a matter which has given the Bureau considerable trouble. The use of drainage wells for this purpose ever constitutes a source of danger to our small deep well supplies. When communities found that they could dispose of the surface water and even sewage, after tank treatment, in this manner, the use of drainage wells especially in the central part of the state became a regular practice. This is a bad practice and is frowned upon by this department. Certain cities and towns in this state dispose of all of their storm water into drainage wells. Thousands of acres of fertile truck lands are irrigated or drained as necessity dictates by wells leading to the underground water. We find lake levels controlled by drainage wells to prevent damage to the roads, groves or homes; we find roadside ditches drained into drainage wells to lower the water table along the right-of-way.

Activities along these lines have been confined to about three cities in this state. Due to many recent request for permits for drainage wells received by the Bureau and the only hope of this Bureau to prevent the increasing use of such wells is to rigidly enforce the Act of the Legislature of 1913 pertaining to the "Protection of the Underground Waters."

The Acts are as follows:

Sec. 2161 Sanitary Code—No municipal corporation, private corporation, person or persons, within the state shall use any cavity, sink, driven or drilled well now in existence, or

sink any new wells within the corporate limits, or within five miles of the corporate limits, of any incorporated city or town, or within any unincorporated city, town or village, or within five miles thereof, for the purpose of draining any surface water or discharging any sewerage into the underground waters of the state, without first obtaining a written permit from the State Board of Health.

Sec. 2162—Every such permit for the discharge of sewerage, or surface water, shall be revocable or subject to modification or change by the State Board of Health, on due notice after an investigation and hearing, and an opportunity for all interests and persons interested therein to be heard thereon; said notice or notices being served on the person or persons owning, maintaining or using the well, cavity or sink, and by publication for two weeks in the newspaper published in the county in which said well, cavity or sink is located. The length of time after the receipt of the notice within which it shall be discontinued may be stated in the permit. All such permits, before becoming operative, shall be filed in the office of the clerk of the circuit court of the county in which such permit has been granted.

Sec. 2162—For the purpose of this chapter, sewerage shall be defined as any substance that contains any of the waste products or excrementitious or other discharge from the bodies of human beings or animals.

Sec. 6124—Every individual, municipal corporation, private corporation or company shall discontinue the discharge within the corporate limits or within five miles of the corporate limits of any incorporated

city or town, or within any unincorporated city, town or village or within five miles thereof, of sewerage or surface drainage into any of the underground waters of the state within ten days after having been so ordered by the State Board of Health.

The above law is self-explanatory and the present policy of this Bureau is to actually carry out to the letter the law when it pertains to an applicant for a permit to dispose of excess surface water, storm or otherwise into the underground waters of this state. It has been the policy of this Bureau to disapprove any application for disposing of sewerage into the underground waters of this state. Anyone desiring to make an application for the drilling of drainage wells in this state must secure from this office an application blank, or from the district sanitary officer in whose district the party desires to drill the well and submit this application for approval. The district sanitary officer will then be requested to make an investigation of the proposed well, the purpose it is to be used for and submit his findings with the notation that he either approves or disapproves the application—the Bureau will then act upon the application, notifying the party concerned of the approval or disapproval of such application.

Under no circumstances should any person, firm, corporation, municipality or any other governmental agency begin the drilling of a well and then request a permit because this is a violation of the state law.

The following rules must be observed by the applicant when the application for a drainage well has been approved by this Bureau:

1. The applicant must agree to use the well only to drain agricultural lands or to hold the lake level at a certain elevation. No sewage must be discharged into this lake or on the land in question.

2. If after the drainage well is in use, nearby water supply wells show evidence of contamination, that might be attributed to the use of this drainage well, the applicant agrees to effectively cap or close the drainage well so that it cannot be further used as such.

3. The applicant must agree to furnish this office and the State Geologist with a complete log or record of the well with samples of material encountered at various depths.

It has been the tendency of persons applying for such permits to lose sight of the fact that surface drainage would amply take care of their particular problem but because they have found that this type drainage is the road to least resistance and do not realize the danger that would result from this particular type of drainage.

Some years ago a serious typhoid fever epidemic occurred in this state due to the fact that a sewerage well not permitted by this office found its way into the water supply of a small community by direct connection thereby causing serious contamination of the water supply which resulted in this serious disease outbreak. This was later corrected. Help us prevent any recurrence of this sort. The district sanitary officers in their respective districts have found many well drillers drilling wells without permits and the well drillers have pleaded ignorance of the law. The policy of the Bureau is to grant approval only after a thorough investigation has been made by the district sanitary officer, providing that no other feasible way for the applicant to get rid of the excess water by surface drainage, and as stated before by no means shall this office grant a permit for the discharge of sewage into the underground water of this state.

The above law was enacted in order to protect the underground waters of this state against undue contamination.

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M.D., *Director*

INFANT MORTALITY

DURING the year 1936, the infant mortality rate in Florida was 59 which was the lowest rate ever recorded in the state. The 1932 rate is the second lowest rate on record. During the calendar year 1936, there was a total of 1,664 deaths of babies under one year of age in Florida as compared with a total of 1,730 for the previous year. The 1936 infant mortality rate was 59 as compared with 62 for 1935.

The following table indicates the rates by color and by years from 1917 to 1936, inclusive. The 1917 figures are the first figures on record in Florida. The information as to the number of infant deaths and infant mortality rates is also shown by color and by counties for 1936.

INFANT MORTALITY—DEATHS OF INFANTS UNDER ONE YEAR OF AGE AND RATES PER 1,000 LIVE BIRTHS, BY COLOR, FLORIDA, 1917-1936.

Years	TOTAL		WHITE		COLORED	
	Deaths	Rates	Deaths	Rates	Deaths	Rates
1936	1,664	59	975	49	689	83
1935	1,730	62	986	50	744	88
1934	1,818	68	1,011	54	807	100
1933	1,619	63	878	50	741	92
1932	1,680	61	940	50	740	86
1931	1,737	64	979	52	758	91
1930	1,729	64	928	50	801	95
1929	1,766	66	953	52	813	95
1928	2,000	67	1,123	54	877	96
1927	2,303	68	1,336	56	967	95
1926	2,614	75	1,545	62	1,069	108
1925	2,179	74	1,219	61	960	104
1924	2,182	82	1,259	70	923	107
1923	1,822	78	1,017	65	805	106
1922	1,691	77	997	65	694	104
1921	1,770	80	1,001	66	769	112
1920	1,835	94	1,031	76	804	134
1919	1,659	89	927	72	732	126
1918	1,947	107	1,148	91	799	145
1917	1,897	106	1,087	86	810	155

INFANT MORTALITY—DEATHS OF INFANTS UNDER ONE YEAR OF AGE AND RATES PER 1,000 LIVE BIRTHS, BY COLOR, BY COUNTIES, FLORIDA, 1936.

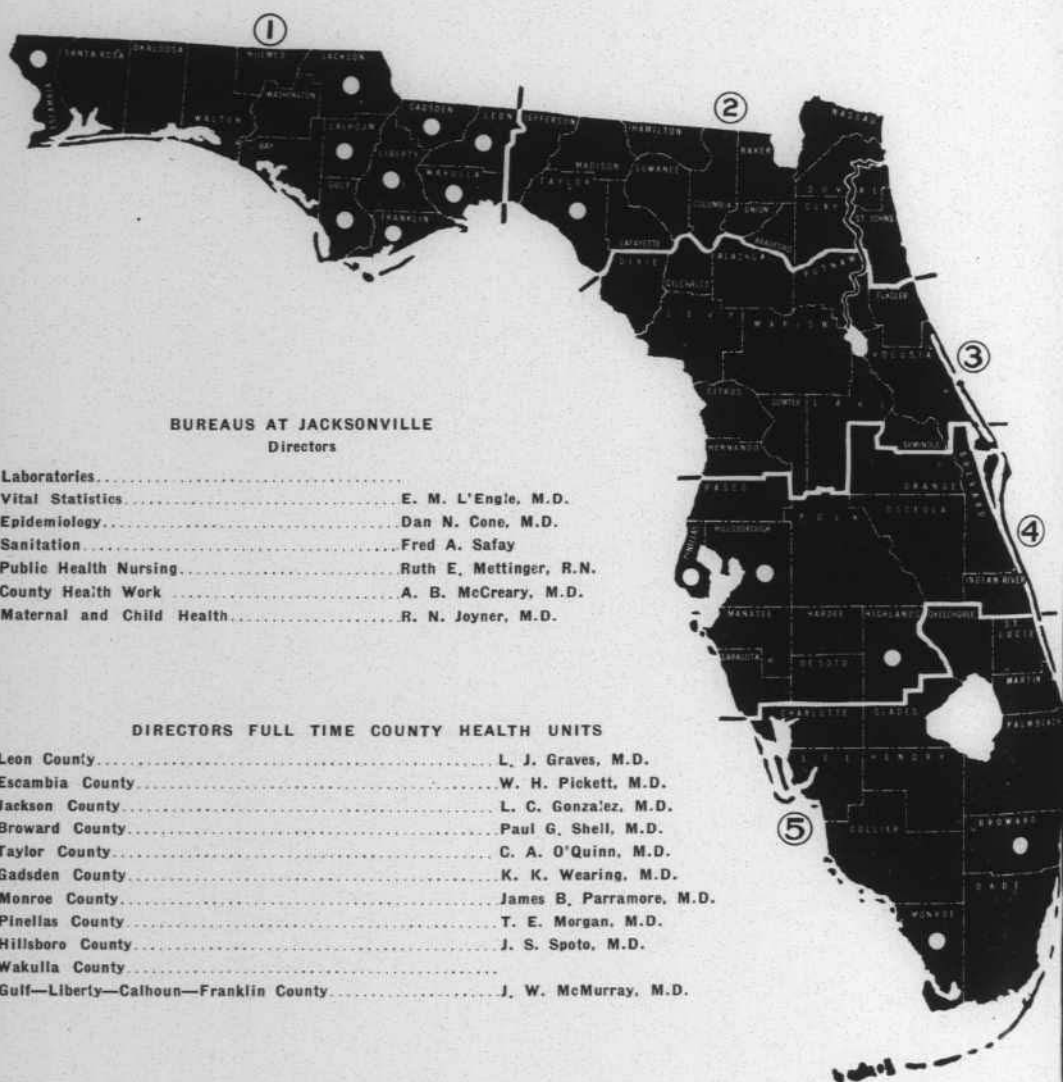
COUNTIES	TOTAL		WHITE		COLORED	
	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births
0. State	1,664	59	975	49	689	83
1. Alachua	50	75	24	68	26	83
2. Baker	4	28	4	36	0	—
3. Bay	24	51	18	46	6	73
4. Bradford	4	23	3	21	1	33
5. Brevard	10	54	5	41	5	79
6. Broward	28	61	7	39	21	93
7. Calhoun	6	29	4	22	2	63
53. Charlotte	3	59	2	49	1	100
8. Citrus	5	52	3	43	2	77
9. Clay	7	83	6	105	1	37
62. Collier	6	107	4	95	2	143
10. Columbia	24	76	14	76	10	75
11. Dade	158	53	99	43	59	89
12. DeSoto	12	74	11	77	1	50
56. Dixie	5	39	4	45	1	25
13. Duval	159	57	88	46	71	81
14. Escambia	75	62	52	55	23	89
52. Flagler	4	114	2	143	2	95
15. Franklin	7	52	6	67	1	22
16. Gadsden (Ex.)	62	111	22	108	40	113
State Hospital	0	—	0	—	0	—
64. Gilchrist	7	59	6	58	1	67
57. Glades	1	19	1	23	0	—
65. Gulf	5	75	4	95	1	40
17. Hamilton	8	36	3	23	5	57
58. Hardee	10	55	10	63	0	—
63. Hendry	0	—	0	—	0	—
18. Hernando	8	71	6	77	2	59
59. Highlands	16	81	12	81	4	82
19. Hillsboro	128	53	98	48	30	74
20. Holmes	13	36	13	37	0	—
66. Indian River	7	40	3	24	4	85
21. Jackson	50	60	26	52	24	72

INFANT MORTALITY—DEATHS OF INFANTS UNDER ONE YEAR OF AGE AND RATES PER 1,000 LIVE BIRTHS, BY COLOR, BY COUNTIES, FLORIDA, 1936—(Continued).

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births	Deaths Under 1 Year	Rates per 1,000 Births
22. Jefferson	35	110	1	15	34	134
23. Lafayette	1	11	1	13	0	—
24. Lake	39	90	24	77	15	123
25. Lee	13	45	11	45	2	47
26. Leon	38	71	12	65	26	74
27. Levy	16	78	9	68	7	95
28. Liberty	6	72	3	57	3	100
29. Madison	38	95	18	89	20	101
30. Manatee	17	51	11	54	6	47
31. Marion	46	77	21	66	25	90
67. Martin	8	108	2	37	6	300
32. Monroe	13	67	9	63	4	82
33. Nassau	4	26	1	11	3	46
34. Okaloosa	16	56	12	45	4	190
54. Okeechobee	5	85	5	106	0	—
35. Orange	45	53	33	51	12	59
36. Osceola	6	41	1	9	5	147
37. Palm Beach	61	75	31	60	30	99
38. Pasco	7	36	6	36	1	37
39. Pinellas	38	45	27	42	11	54
40. Polk	78	53	53	46	25	77
41. Putnam	28	84	11	56	17	126
42. St. Johns	15	42	6	25	9	78
43. St. Lucie	13	73	8	73	5	71
44. Santa Rosa	20	53	17	52	3	59
60. Sarasota	11	55	8	59	3	47
45. Seminole	32	82	11	60	21	100
46. Sumter	11	55	4	39	7	106
47. Suwannee	16	43	6	26	10	71
48. Taylor	11	56	8	53	3	64
61. Union	2	16	0	—	2	74
49. Volusia	34	53	19	44	15	70
50. Wakulla	3	32	2	38	1	24
51. Walton	13	47	11	46	2	56
52. Washington	19	75	13	65	6	107

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



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HEALTH NOTES

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WE HONOR IN THIS ISSUE



N. A. BALTZELL, M.D.
President, Florida State Board of Health



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TO AMERICA'S SCHOOLS - - YOUR HEALTH

Once more, during the coming fall, winter and spring, the Voice of Medicine will salute the people of America, with the toast "YOUR HEALTH." This is the well-known title of the radio program of the American Medical Association and the National Broadcasting Company. The coming season will be the fifth; the first two years were devoted to health talks, and the last two seasons to dramatized health messages. This year, the salutation will be addressed particularly to the teachers and students in the Junior and Senior High Schools, in the hope that the program will be helpful in illustrating, amplifying, and enriching the health teaching in those schools. The program will be on the air while schools are in ses-

sion, so that the program may be utilized directly in the thousands of schools which now have or soon will have radio and public address systems reaching the class rooms. Programs will be announced in advance in *HYGEIA*, the Health Magazine. While the program is planned especially for high schools, it will not sacrifice the interest which it has held for listeners in the home. To teachers, students and stay-at-homes, the American Medical Association and the National Broadcasting Company will address their message of health education with the familiar musical theme, *HALE AND HEARTY*, written especially for the program, and the toast "TO AMERICA'S SCHOOLS, YOUR HEALTH."

A NEW PUBLIC HEALTH MENACE

M. H. Doss, *Chief Inspector*

DIVISION OF DRUG INSPECTION

NO drug or chemical has been so called to the attention of the public recently as has the compounds and derivatives of phenol barbituric acid. This is a coal tar derivative and is generally known under the trade names of luminal, allonal, barbital, sodium barbital, nembutal and various other trade names.

This drug is known in medicine as a hypnotic and has a most important place in the legitimate practice of medicine, but today it is misused even more than narcotic drugs. This drug, when taken in large doses, produces a drunken stupor similar to the effects of whiskey only that it has a tendency to completely knock a person out.

Officers of this bureau have been called to the various police departments of the State where persons, picked up by the police, gave every evidence of being doped. We have secured evidence that the drug has been used in beer in disreputable places or "clip joints" for the purpose of rendering the victim unconscious in order to rob him. It has even been found that the drug was administered to girls of high school age at parties for the purpose of assaulting them.

A bill known as the dangerous drug act was introduced at the last legislature but failed to pass. This act proposed to control the sale of this dangerous drug except on the prescription of a physician and to impose a penalty for the violation of the act. A recent survey among the police departments and municipal courts disclosed the fact that the drug is causing more trouble to these agencies than recognized narcotic drugs.

Several of the larger cities of Florida have recently enacted laws regulating the sale of this drug that are similar in nature to the proposed "Dangerous Drug Act." A number of the States have placed such a law upon their statute books with excellent results.

Recently a man was brought into the police station of one of our larger cities under the charge of operating a car while drunk. Upon investigation it was found that the man had never been known to touch intoxicants of any kind. And then the story was told: the man had been suffering severely from insomnia for several nights and had sought the advice of a druggist to prescribe something that would make him sleep. The druggist sold him a dozen barbital tablets with instructions to take one every hour until sleep came to him. It so happened that after he had taken the fourth tablet he was called out of bed and forced to drive his car. Shortly the drug began to take effect and the arrest followed. Afterwards he professed no knowledge of being arrested and could not even remember being brought to the police station.

Another case which came to the attention of this bureau was that of an elderly woman whose family was attempting to have committed to the State Hospital for drug addiction. Upon investigation it was determined that the woman was addicted to barbital and because there were no laws in effect to govern the case nothing could be done about it. In still another instance a young wife sought the aid of the bureau to stop her husband from taking dope. It was found that he was taking about two dozen barbital a day. At the time of the investigation he had been in a stupor for about ten days awaking only long enough to take his meals, but because the purchase of this drug was perfectly legal there was nothing we could do to prevent his obtaining it.

There are hundreds of such cases in Florida today where persons are found to be addicted to this drug. It is found that addicts of morphine, cocaine, heroin, etc., find the drug a good substitute for narcotics which are daily being harder for the non-medical to obtain.

POLLUTION OF OUR WATERS DETRIMENTAL TO THE HEALTH AND WELFARE OF THE STATE

G. F. CATLETT

State Sanitary Engineer

Florida has one of the longest shore lines of any State in the Union. This is indented with bays and estuaries, and the interior of the State is dotted with hundreds of fresh-water lakes. These waters constitute one of the important attractions for Florida visitors and its position as the nation's playground is built around them. In addition to scenic and climatic value, they serve for bathing, fishing, boating and other recreational activities. Obviously, the pollution of these waters with sewage, filth and trade wastes is not only a menace to health, but a direct and serious detriment to the economic interests of the State.

Nature provides for the disposal of waste material by biochemical processes in soil and waters. However, with modern civilization, great populations are concentrated in relatively narrow confines and nature's facilities are enormously overloaded. Industries discharge large quantities of wastes to streams in relatively small areas, vastly in excess of what the stream could handle or what it was intended that it should handle. Resulting conditions have been most serious. In New England where large populations have been concentrated over small areas for years, and great industrial centers grown up, streams have been so overloaded as to constitute open sewers. Along the Ohio Valley similar situations exist. Progress has been made in the usual American way, with little thought of conservation, until we are now faced with a serious national problem. The National Resource Committee, appointed by the President, had an important Sub-Committee on Water Resources, and this Committee has made a very instructive survey with comprehensive recommendations. No less than ten separate bills have been introduced in Congress concerning

stream pollution. All are agreed that something should be done, the differences in opinion being as to how to do it.

Due to the Federal Public Works Program, sewage treatment has had an unprecedented increase during the last five years, during which time the population served by sewage treatment works has increased 73 per cent. Of an urban population of 72,000,000, there are 37,000,000 served by sewage treatment plants. This is approximately half, while five years ago only 31 per cent were so served. In treatment of industrial wastes, however, little has been accomplished.

In Florida, little has been done to prevent this pollution. The main reason for this is that Florida's population has grown most rapidly in the last two decades and only comparatively recently have we developed large population concentrations. Industries producing wastes are a new development. In the citrus canning industry, rapidly growing, numerous complaints have been made. The very recent intense interest in paper board manufacturing has presented a new phase of the problem, as such mills produce one of the most serious pollution problems.

Sections 3160, 3181, 3183, 7737, Compiled Statutes, 1929, authorize the Board of Health to make and enforce rules and regulations as to disposal of sewage and refuse matter, and to exercise supervision over sewage disposal and other sanitary works. It is also empowered to advise and consult with municipalities, corporations, etc., as to best methods of disposal of drainage, sewage, or refuse; to consult and advise with companies or individuals engaged or intending to engage in any manufacturing or other business whose wastes tend to pollute the waters of

the State. Sections 3890 and 3893 forbid the discharge of sewage into underground waters without permit from the State Board of Health.

All of these laws are difficult of enforcement and accomplish little without cooperation from the municipalities. The State Board of Health has never had the technical personnel or equipment to properly study the pollution problems, and the financial condition of the municipalities has precluded compliance with reg-

ulations in a satisfactory and economical manner.

The general problem is one that should be included in any State planning program. The specific problem needs a definite planning program for each municipality. In promoting the location of new industries care should be exercised to insure locations where the public interest will not be interfered with by wastes from the industry.

"A MUST ITEM"

DAN N. CONE, M. D.,
Collaborating Epidemiologist

Diphtheria, typhoid fever and smallpox are three diseases that have been conquered scientifically, but in reality are still among us.

DIPHTHERIA MORTALITY (Deaths)

	Jan.	Feb.	March	April	May	Total
1936	5	7	3	2	4	21
1937	3	5	3	5	2	18

MORBIDITY (Cases Reported)

	Jan.	Feb.	March	April	May	Total
1936	46	23	27	14	11	121
1937	47	37	29	19	29	161

TYPHOID

MORTALITY (Deaths)

	Jan.	Feb.	March	April	May	Total
1936	1	3	1	7	5	17
1937	5	1	9	5	4	24

MORBIDITY (Cases Reported)

	Jan.	Feb.	March	April	May	Total
1936	5	10	8	11	17	51
1937	2	5	12	14	15	48

The above deaths and cases of sickness were inexcusable theoretically,

in reality they were caused by "just a little careless neglect" on the part of the parents. Mothers and fathers should place in the "MUST COLUMN" of the family duties the small, but important, task of having their children immunized against these three diseases. Diphtheria, especially, attacks children. All children, white or colored, between the ages of six months and six years, the preschool age, should have the diphtheria toxoid inoculation, except in cases where the Schick test shows that the child is already immune. It takes only one shot, a very few minutes of time, practically no pain for the treatment. Either mother or father should attend to this duty now. Your family physician will administer the treatment for a very nominal sum. If you do not have a family physician, contact your district or county health officer. When you attend to this small family duty, you help yourself, protect your neighbor and cooperate with your health department. Your child could be one of the victims of one of these preventable diseases. Memorize the old adage, "the ounce and pound," it applies here.

PREPAREDNESS

FRED A. SAFAY

Director, Bureau of Sanitation

"Be Prepared," the watchword of the Boy Scouts organization, aptly applies to the Bureau's field personnel at this season. A special, and when necessary, a very important function of the Bureau of Sanitation, is storm relief work—the key-note of which is Preparedness.

During the early part of July a two-day course of instruction for the Sanitary Officers and their assistants was held at the Bureau headquarters in Jacksonville, at which time Bureau policies and duties were discussed. As a part of this course, the matter of disaster relief, more especially storm relief—was stressed, and definite procedure to be followed in time of disaster taken up.

The senior Sanitary Officers of the Bureau have had special training in this line of service and in selecting the subject of disaster relief—storm relief, at this time it is in an effort to acquaint the citizens of the State with the services this Department is prepared to render, should disaster strike.

Disaster relief may be divided into three subdivisions: pre-disaster preparedness, emergency relief and post disaster relief or rehabilitation. It is with emergency relief that the work of the Bureau is mainly concerned.

Some of the most vital problems to be considered following disaster are the questions of safe drinking water, proper sewage disposal and sanitation of emergency or refugee camps. These are subjects on which the Bureau field men are fully conversant. The proper method of sterilization of water systems is a matter on which the Sanitary Officers have received special training and emergency chlorinator units are available at the Bureau headquarters for immediate shipment to any point in the State. The prompt re-establish-

ment of a public water supply or milk pasteurizing plant is of inestimable importance in protection of public health, following disaster, and for service necessary in this work the Bureau personnel is trained. The Sanitary Officer will supervise sterilization and protection of any public or private water supply.

Realizing the importance of trained units for relief work the Bureau at all times has cooperated with interested organizations and departments throughout the State in an endeavor to have the work well understood and coordinated should representatives be called into service.

Representatives from this Bureau attend all meetings held to consider disaster preparedness. At a recent Disaster Preparedness Conference held in West Palm Beach on August 3, it was clearly brought out that a definite understanding exists in the several organizations in the State as regards this very important matter.

That the matter has been given serious thought, and the words "Be Prepared"—a very significant meaning, is evidenced by the representative groups present at the above meeting. Representatives from the following organizations being in attendance:

U. S. Coast Guard, Base 6, Ft. Lauderdale; Southern Bell Tel. & Tel. Co.; State Board of Health; American Legion Storm Disaster and Relief, Lake Worth; Postal Telegraph Co.; Good Samaritan Hospital, West Palm Beach; City of Lake Worth; Boy Scouts of America, West Palm Beach; County Welfare, Palm Beach; State Board of Social Welfare; U. S. Naval Reserve, Palm Beach; Sta. WJNO, West Palm Beach; U. S. Weather Bureau, Miami; Lions Club, West Palm Beach; Palm Beach Sun; WPA, West Palm Beach; *Post-Times*, West Palm Beach; Palm Beach County Physician.

Red Cross Chapters:

Indian River County Chapter, Vero Beach; St. Lucie Co. Chapter, Ft. Pierce; Palm Beach County Chapter.

Citizens from the following towns:

Melbourne, Okeechobee, Sebring, Ft. Lauderdale, Jupiter, Dania, Boynton, Lake Worth, Hollywood, Pahokee.

It is further gratifying to note as reported by Field Directors of the

National Red Cross, who have been conducting a series of Disaster Preparedness meetings in Florida, that a more satisfactory understanding exists as regards responsibility and proper procedure in case of disaster and emergency.

In conclusion we wish to leave the thought that the State Board of Health through its Bureau of Sanitation is prepared and ready to be of service at any and all times.

THE RELATIONSHIP OF PHARMACY, PUBLIC HEALTH AND MEDICINE

W. A. MCPHAUL

State Health Officer

It is unfortunate that while we have a great deal of literature on the subject of medical history, there is being very little written on the history of pharmacy. It is an interesting one that deserves the respect and attention of all followers of pharmacology. Galen, Robert Boyle and one of the greatest men of modern times, Claude Bernard, are only a few of the great men who made history in the field of experimental pharmacology, or *materia medica*.

To the modern pharmacist has come this great heritage of unselfish pioneering and service to science. The work of experimentation is still going on. It is to the pharmacists primarily, that we owe such beneficial discoveries as the preventive serums used against diphtheria, typhoid, tetanus, scarlet fever, and such diseases which formerly killed thousands of helpless victims. We are aware that in the great pharmacological laboratories work is continuously going forward which will eventually result in other discoveries to fight the war against disease.

More than 700 years ago the joint responsibility of the physicians and pharmacists was recognized by a State edict. Frederick of Sicily said: "Prices charged for medicines were

to be regulated and the physicians were forbidden to share in the profits of prescriptions by clandestine arrangements with the pharmacists."

It is apparent then, that the relationship of druggist, physician, dentist, nurse and public health worker is a close one. To use the beneficial discoveries and methods of the one, we must have the cooperation of the other professions. The doctor, the druggist, and the public health official are allies who must work harmoniously together for the benefit of each other and of mankind. How can this best be achieved? How can we work together, independent to every possible extent, yet always meeting on a common ground?

Proper and timely legislation has and will continue to play a part in this and the broader educational requirements now emphasized in all four professions will be of great benefit in bringing about closer cooperation and understanding of our common problems. Health education directed toward the lay population will do a great deal to do away with the insidious practice of self-medication, which is of no benefit to the physician, the public health official,

the druggist, and least of all, to the Commonwealth.

With reference to the matter of health education of the people, I quote from a speech by Dr. Robert L. Swain of the Philadelphia College of Pharmacy and Science: "If the public could be educated to associate the drug store with community health, and if pharmacy entered into and played a part in the health programs of the State, the desired object (that of raising the drug store to its rightful place of dignity in the community) would come about by the sheer weight of an enlightened public opinion."

In the matter of legislation, it is wise to examine them on several counts: how necessary are they—how best can they be operated—what further legislation will aid us in the welfare of pharmacy.

The educational requirements in every profession are becoming more rigid. This is true in pharmacy as well as in public health and medicine. Professions cannot stand still any more than time, and it is therefore true that what may have been adequate training twenty years ago, will not suffice today. He must be trained in the new ideas as well as the old. He must have training to cope with the more complicated problems which will inevitably face him. The question of academic training is one which has many angles. We all know many men whose lack of educational background is not a hindrance to their success, simply because their personality and intelligence have been able to overcome the barrier. But usually you will find that these men are among the first to acknowledge the need for better educational standards for the profession to which

they belong. The rise of any profession will always be accompanied by more rigid requirements of training.

The necessity and benefits of close cooperation and understanding among physicians, public health officials, pharmacists, dentists and nurses, cannot be emphasized too often. Each has separate ways of working, but for the same end. To better the health of the people is the common aim of all of us. The cause and prevention of many of the diseases which were formerly responsible for thousands of deaths are known. It is unnecessary for any child to have diphtheria, or smallpox, or tuberculosis. Through the use of serum we can minimize the danger of typhoid, through the use of sanitary measures, proper water supply and adequate disposal, hookworm, one of the great scourges of the South could be eliminated. But still there are thousands of people who do not know any of these things. In spite of the great advances in medicine, in public health, and in pharmacology, these diseases still exist. Here is a common meeting ground. It should be the duty of all of us to spread the gospel of health education. To make people become "health conscious." To make them realize that science will give them a longer and healthier happy life, if they will only take it. Every mother should know that her child should be immunized against diphtheria and smallpox, and her family should have a personal physician, and periodic health examinations. Every rural home should have a safe water supply and sanitary sewage disposal.

These things fall more correctly in a public health program, and yet the pharmacist has an unique opportunity to perform a valuable service in the health education of the people.

THE NEED FOR PRENATAL CARE

R. N. JOYNER, M. D.

Director, Bureau Maternal and Child Health

"There were heart-rending scenes when patients knelt down, wringing their hands, to beg for a transfer to the second Hospital, having by a mistake on their part, applied for admission to the first Hospital. Women recently confined, with a pulse so frequent that it could not be counted, with abdomens enormously distended, with dry tongues—in a word, women suffering from childbed fever—would insist, only a few hours before their death, that they were perfectly well, their object being to avoid medical treatment, since they knew that medical treatment was the immediate precursor of death."

That was in 1846, in the Viennese Lying-in Hospital in Vienna. The writer was Ignaz Semmelweiss, the man, who in the face of much abuse and criticism demonstrated that childbed fever was an infectious disease, the result of unsterile examinations and poor treatment of women in labor. The patients in the first Hospital, which he mentions, were examined and treated by the medical students and doctors. The mortality rate there was 30%. Those in the second Hospital were handled by the midwives who made no pelvic examinations and who did not make instrumental deliveries. Their mortality rate was only 3%.

Semmelweiss proved by his observations and deductions that these patients were infected by unsterile examinations. He made his students wash their hands in a strong antiseptic solution before making examinations, and before assisting at deliveries. He suggested other improvements in technique and treatment and thus laid the foundation of modern obstetrical care.

It is because of Semmelweiss' determination and courage that doctors today are able to carry their patients through the period of preg-

nancy, deliver them safely, and give them normal and healthy children. Yet every year in the United States, 15,000 women die from causes connected with pregnancy and childbirth. Seventy-five per cent of these deaths are preventable in the light of our present medical knowledge. While it is the unquestionable right of every expectant mother to have her baby safely, with a minimum of discomfort, and without permanent physical deformities, experience has taught us that this happy result cannot be expected in every case. Constitutional diseases, unhygienic living, racial mixtures, and previous ill-health dooms many expectant mothers to invalidism, loss of their babies, or death. But the great majority of these maternal deaths can be prevented as certainly as deaths from typhoid fever and diphtheria.

The entire country is shocked when it reads of an aeroplane accident that takes the lives of twelve men and women; or it recoils with horror when a hurricane snuffs out two hundred lives. If every person in a city the size of Gainesville or Lakeland were suddenly smitten with a deadly pestilence, every man, woman and child in the world would read of the catastrophe. Again, floods and storms devastate wide areas, wiping out whole communities, earthquakes come, killing and maiming thousands, and the world gasps in terror. Still the loss of human life under all these circumstances is but a small fraction of our preventable maternal deaths, year in and year out.

Little need be said of the great unknown number of women, who become invalids each year as a result of childbearing, nor of the enormous sacrifices of infants every year, nor even of the economic loss thereby to the nation. How many women become invalids, how many infants are

needlessly lost, how great the economic loss is, we don't know. Were such statistics available they would be no less astounding than those dealing with our preventable maternal deaths.

What are we going to do about these fifteen thousand unnecessary and preventable deaths? Florida contributed two hundred and thirty-eight to that number in 1935. There is only one possible answer. We must get every expectant mother to her physician early in pregnancy. We

must make prenatal care easily available to her. We must educate her in what medical profession can do for her if she but seeks its aid. But it is definitely up to her to see that she gets what she needs. We cannot force prenatal care upon her. The responsibility is hers. On the other hand the responsibility of providing such care is just as definitely ours. We must furnish the means and teach the mother to take more than a casual interest in an experience which might well prove disastrous for her or her baby, or both.

TEETH, NUTRITION AND HEALTH

E. C. GEIGER, D. D. S.

Director, Bureau of Dental Health

"Teeth are dependent upon nutrition, and nutrition depends indirectly upon teeth." Good health results from the ability of the digestive system to function properly, which allows assimilation of food and subsequent nutrition for the entire physiologic process.

A change is constantly taking place in the tissues of the body, promoted by metabolism. Metabolism is divided into two parts: a "wasting away" of body cells and a "building up." The conversion of food into energy and living organized substance through this process is responsible for growth and repair. It is well to remember that teeth are the only part of the human body that is incapable of repairing itself. Therefore the teeth are dependent upon a constant and sufficient nutritive supply to prevent

a "wasting away" of certain elements within the tooth structures.

The oral cavity is a most sensitive index of undernourishment and other general "wasting away" sequelae. The gum tissue and teeth will usually reflect this condition before any other part of the body, and when the cause of the systemic disturbance is removed, will rarely respond without professional intervention.

The man on the street may say, "My teeth are soft, they won't hold fillings," or "The whole side of a tooth caved in for no reason at all." It is a fact that teeth are the most indestructible relics of prehistoric vertebrate animals and primitive people, but the teeth of many modern people will hardly be retained for posterity, all things being equal.

The course of the digestive tract begins in the mouth. Food is torn, crushed, ground and mixed with saliva preparatory to excursion down the esophagus to the stomach. An enzyme called ptyalin is present in saliva and acts upon starches converting them into maltose and dextrose; hence digestion, in a form, actually begins in the mouth. The necessity of thorough chewing is obvious; an inefficient chewing apparatus, and hurried eating habits result in retarded and impaired digestive efficiency. Subsequent complications are manifold, of which undernourishment and digestive disorders are outstanding. It is reasonable to assume that a well selected and hygienically prepared diet is contaminated by a mouth containing decayed and infected teeth. The human physiologic process is marvelous beyond description when it is considered that the average poor modern diet may be prepared for digestion by a defective dental apparatus with resulting poor digestion, malnutrition and consequent lowered resistance to disease, and may maintain a focus of infection in the teeth and gums. In the event a communicable or infectious disease does not come along soon, the dental infection is held in escrow to induce slow but sure degenerative diseases.

The same average modern-day diet is incapable of producing the necessary stimulation to any part of the digestive tract. Raw fruit and vegetable salads, bread crusts, and meats produce exercise for the teeth and gums; proper use of the tooth brush has a certain massaging effect upon the gum tissue, and is a good habit of personal cleanliness. However, en-

tire dependence upon this form of artificial stimulation is a subterfuge to nature. Sufficient natural foods act as a detergent, not only upon the teeth, but upon the intestinal tract as well. The lower digestive tract requires stimulation, but certain harsh foods would provide irritation and should not be used.

A method of intestinal hygiene and digestive stimulation may be produced by employing a simple form of exercise every morning. Immediately upon arising two glasses of room temperature water should be taken. Then, lying flat on the back, either in bed or on the floor raise the body to a sitting position, bending at the waist. Do this several times. Next lift the feet over the head as many times as possible without becoming too fatigued. To analyze this simple procedure: the stomach is empty except for the water, and the exercise produces an hydraulic action. The inversion of the digestive organs stimulates the flow of blood to these parts. The walking, sitting, and lying postures, assumed during the day and night, are not a stimulation because the digestive tract is filled and is hard at work. This form of exercise will promote peristalsis, the normal wave-like movement of the intestines, and in turn will prevent auto-intoxication and stimulate assimilation of food by increasing the activity of the dynamo of metabolism. This may be a preventive adjunct to inflammation of the appendix.

It is also necessary to include vitamin D in the diet, which is found primarily in direct sunlight and in fish liver oils. The absorption of calcium and phosphorus is dependent upon the acidity of the intestinal flora, and this is established through vitamin D.

LABORATORY NOTES

PEARL GRIFFITH
Bacteriologist in Charge

The Central Laboratory has just been enlarged by the building of an annex which has provided much needed room for the increasing service of this department. New equipment has been purchased and two technicians with laboratory experience have been added to the personnel.

Arrangments have been made by Dr. W. A. McPhaul, State Health Officer, whereby we are sending a technician to the Laboratory at Ann Arbor, Michigan, for observation and

study of the latest developments in the Kahn Test for syphilis, under the personal supervision of Dr. R. L. Kahn. While there she will also make further study of the preparation of the Antigen used in this work.

It has been the practice in the past to submit all Antigen made here for the Kahn Tests to the Laboratory of Dr. Kahn for comparison with his Standard Antigen before its use. This has been done in an effort to keep the results of our work comparable with the results obtained in other approved laboratories.

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE
BOARD OF HEALTH DURING THE MONTH OF JULY, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	2171	643	306	117	109	3346
Diphtheria	347	140	76	123	9	695
Typhoid	1807	288	123	76	15	2309
Malaria	1765	553	179	32	166	2695
Rabies	71	2	4	2	...	79
Tuberculosis	304	199	41	39	...	583
Gonorrhea	1386	403	190	279	76	2334
Water	...	73	47	186	...	306
Kahn	4936	2265	660	2468	327	15156
Milk	273	296	168	321	57	1115
Miscellaneous	1367	112	271	358	28	2136
	18927	4974	2065	4001	787	30754
Specimen containers distributed						18431

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	28 Packages
	5,000 units	18 Packages
Schick	890 Tests	
Toxoid	615 C. C.	
Typhoid Bacterin	2440 Treatments	
Vaccine Virus	1343 Capillaries	
Antirabic Virus	110 Treatments	
P. P. D. Tuberculin	100 test pkgs.	6 Pkgs. 1st strength
		5 pkgs. 2nd strength
P. P. D. Tuberculin	10 test pkgs.	8 Pkgs. 1st strength
		8 pkgs. 2nd strength

ALL REQUESTS FOR BIOLOGICAL PRODUCTS SHOULD BE SENT TO THE
STATE LABORATORY, STATE BOARD OF HEALTH, JACKSONVILLE, FLA.

BUREAU OF VITAL STATISTICS

MATERNAL MORTALITY

E. M. L'ENGLE, M. D.

Director, Bureau of Vital Statistics

The year 1936 showed the lowest maternal mortality rate in Florida since the Model Vital Statistics Law was passed in 1917. During 1936 there was a total of 216 deaths of mothers as a result of childbirth as compared with 238 in 1935. The respective rates were 7.7 and 8.5 per

1,000 live births. The next lowest rate was 8.2 in 1934. The highest rate, 12.4, was in 1923.

The rate among the white population was considerably lower than among the colored. The white rate was 6.0, the colored rate 11.8.

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State, and Rates per 1,000 Live Births, by Color, Florida, 1917-1936

YEARS	TOTAL		WHITE		COLORED	
	Puerperal Deaths	Per 1,000 Births	Deaths Puerperal	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births
1936	216	7.7	118	6.0	98	11.8
1935	238	8.5	140	7.1	98	11.6
1934	219	8.2	127	6.8	92	11.4
1933	285	11.1	154	8.7	131	16.2
1932	262	9.6	149	7.9	113	13.2
1931	267	9.9	142	7.6	125	14.9
1930	267	9.9	155	8.3	112	13.3
1929	255	9.5	144	7.9	111	13.0
1928	280	9.4	175	8.5	105	11.5
1927	352	10.3	202	8.5	150	14.7
1926	357	10.3	214	8.6	143	14.5
1925	330	11.3	186	9.3	144	15.6
1924	284	10.6	138	7.6	146	16.9
1923	287	12.4	164	10.5	123	16.2
1922	235	10.7	128	8.4	107	16.0
1921	230	10.4	119	7.8	111	16.2
1920	181	9.3	97	7.2	84	14.0
1919	183	9.8	96	7.5	87	15.0
1918	174	9.6	89	7.0	85	15.4
1917	207	11.6	125	9.8	82	15.7

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State, and Rates per 1,000 Live Births, by Color, by Counties, Florida, 1936

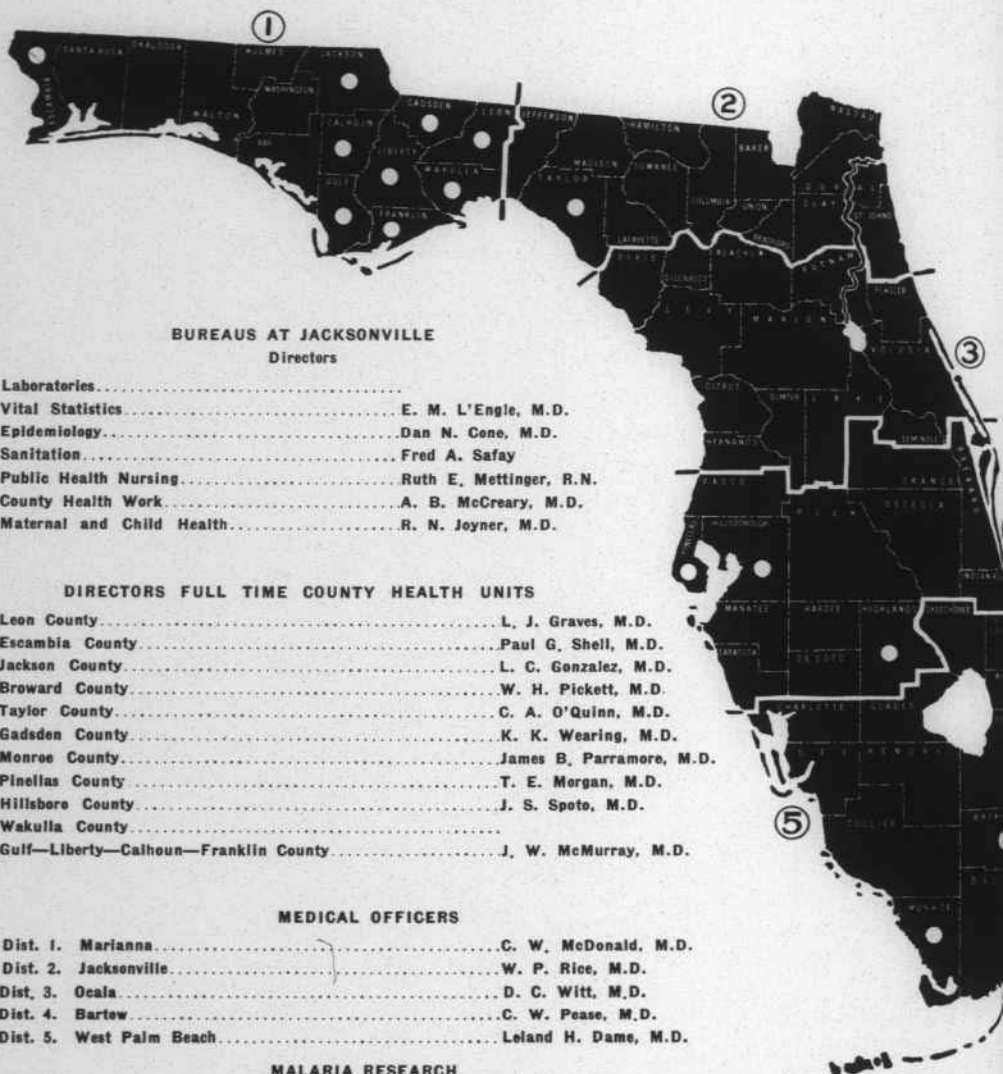
COUNTIES	TOTAL		WHITE		COLORED	
	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births
State	216	7.7	118	6.0	98	11.8
Alachua	8	12.0	3	8.5	5	15.9
Baker	2	13.9	1	8.9	1	31.3
Bay	2	4.2	2	5.1	0	—
Bradford	1	5.8	1	7.0	0	—
Brevard	2	10.8	0	—	2	31.7
Broward	4	8.7	4	17.2	0	—
Calhoun	1	4.8	1	5.6	0	—
Charlotte	2	39.2	1	24.4	1	100.0
Citrus	0	—	0	—	0	—
Clay	0	—	0	—	0	—
Collier	0	—	0	—	0	—
Columbia	8	25.2	7	38.0	1	7.5
Dade	16	5.4	11	4.8	5	7.5
DeSoto	4	24.7	2	14.1	2	100.0
Dixie	1	7.8	0	—	1	25.0

Deaths from Diseases of Pregnancy, Childbirth and Puerperal State, and Rates per 1,000 Live Births, by Color, by Counties, Florida, 1936—(Continued)

COUNTIES	TOTAL		WHITE		COLORED	
	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births	Puerperal Deaths	Per 1,000 Births
Duval	26	9.3	13	6.8	13	14.8
Escambia	12	10.0	7	7.4	5	19.4
Flagler	0	—	0	—	0	—
Franklin	0	—	0	—	0	—
Gadsden (Ex.)	5	9.0	2	9.8	3	8.5
State Hospital	0	—	0	—	0	—
Gilchrist	0	—	0	—	0	—
Glades	0	—	0	—	0	—
Gulf	0	—	0	—	0	—
Hamilton	1	4.5	0	—	1	11.4
Hardee	0	—	0	—	0	—
Hendry	0	—	0	—	0	—
Hernando	0	—	0	—	0	—
Highlands	1	5.1	1	6.7	0	—
Hillsboro	15	6.2	13	6.4	2	5.0
Holmes	3	8.3	3	8.5	0	—
Indian River	1	5.8	0	—	1	21.3
Jackson	3	3.6	0	—	3	9.0
Jefferson	3	9.4	0	—	3	11.9
Lafayette	1	11.5	1	12.7	0	—
Lake	4	9.3	2	6.5	2	16.4
Lee	3	10.4	2	8.1	1	23.3
Leon	7	13.1	4	21.7	3	8.6
Levy	1	4.9	0	—	1	13.5
Liberty	1	12.0	1	18.9	0	—
Madison	2	5.0	0	—	2	10.1
Manatee	3	9.0	0	—	3	23.4
Marion	5	8.4	2	6.3	3	10.8
Martin	0	—	0	—	0	—
Monroe	0	—	0	—	0	—
Nassau	0	—	0	—	0	—
Okaloosa	3	10.4	1	3.7	2	95.2
Okeechobee	0	—	0	—	0	—
Orange	10	11.7	5	7.7	5	24.5
Osceola	1	6.9	0	—	1	29.4
Palm Beach	7	8.6	0	—	7	23.1
Pasco	0	—	0	—	0	—
Pinellas	3	3.6	2	3.1	1	4.9
Polk	16	10.8	11	9.5	5	15.4
Putnam	2	6.0	2	10.1	0	—
St. Johns	3	8.4	0	—	3	25.9
St. Lucie	1	5.6	0	—	1	14.3
Santa Rosa	1	2.6	1	3.0	0	—
Sarasota	5	25.0	4	29.4	1	15.6
Seminole	2	5.1	1	5.5	1	4.8
Sumter	1	5.0	0	—	1	15.2
Suwannee	2	5.4	1	4.4	1	7.1
Taylor	1	5.1	1	6.7	0	—
Union	0	—	0	—	0	—
Volusia	6	9.3	2	4.7	4	18.7
Wakulla	2	21.1	1	18.9	1	23.8
Walton	1	3.6	1	4.2	0	—
Washington	1	3.9	1	5.0	0	—

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



BUREAUS AT JACKSONVILLE Directors

Laboratories.....	
Vital Statistics.....	E. M. L'Engle, M.D.
Epidemiology.....	Dan N. Cone, M.D.
Sanitation.....	Fred A. Safay
Public Health Nursing.....	Ruth E. Mettinger, R.N.
County Health Work.....	A. B. McCreary, M.D.
Maternal and Child Health.....	R. N. Joyner, M.D.

DIRECTORS FULL TIME COUNTY HEALTH UNITS

Leon County.....	L. J. Graves, M.D.
Escambia County.....	Paul G. Shell, M.D.
Jackson County.....	L. C. Gonzalez, M.D.
Broward County.....	W. H. Pickett, M.D.
Taylor County.....	C. A. O'Quinn, M.D.
Gadsden County.....	K. K. Wearing, M.D.
Monroe County.....	James B. Parramore, M.D.
Pinellas County.....	T. E. Morgan, M.D.
Hillsboro County.....	J. S. Spoto, M.D.
Wakulla County.....	
Gulf—Liberty—Calhoun—Franklin County.....	J. W. McMurray, M.D.

MEDICAL OFFICERS

Dist. 1. Marianna.....	C. W. McDonald, M.D.
Dist. 2. Jacksonville.....	W. P. Rice, M.D.
Dist. 3. Ocala.....	D. C. Witt, M.D.
Dist. 4. Bartow.....	C. W. Pease, M.D.
Dist. 5. West Palm Beach.....	Leland H. Dame, M.D.

MALARIA RESEARCH

Mark F. Boyd, M. D., Tallahassee.....	Rockefeller Foundation
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ENTOMOLOGY

W. V. King, Ph. D., Orlando.....	U. S. Bureau Entomology
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(MONROE CO. HEALTH
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FLA STATE LIBRARY
TALLAHASSEE FLA

FLORIDA STATE LIBRARY

FLORIDA

HEALTH NOTES

VOL. 29

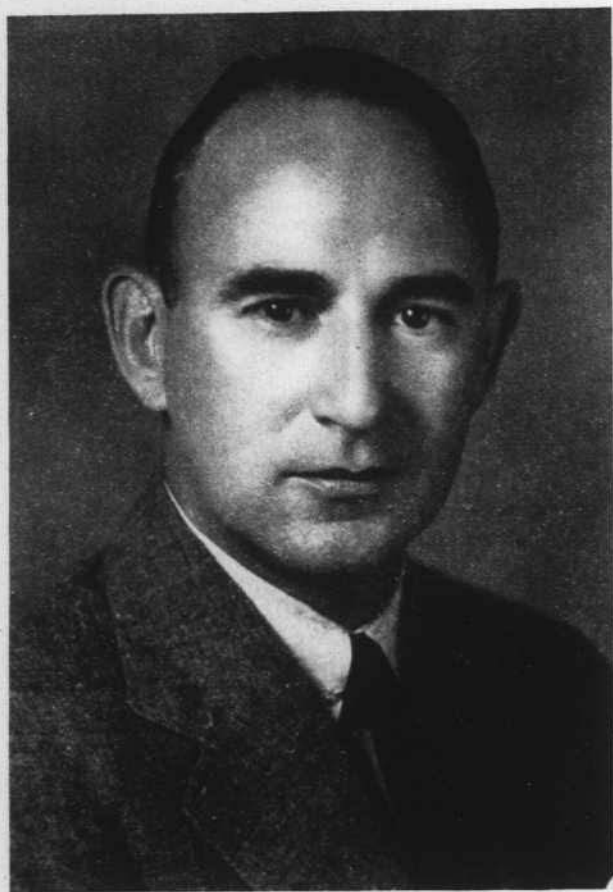
SEPTEMBER, 1937

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WE HONOR IN THIS ISSUE



SHALER RICHARDSON, M. D.
Member, Florida State Board of Health



FLORIDA HEALTH NOTES

Official Monthly Publication of the
STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

Est. 1892

HON. FRED P. CONE *Governor of Florida*

N. A. BALTZELL, M.D., *Pres.*
Marianna

BOARD MEMBERS
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Jacksonville

A. WM. MORRISON
Miami

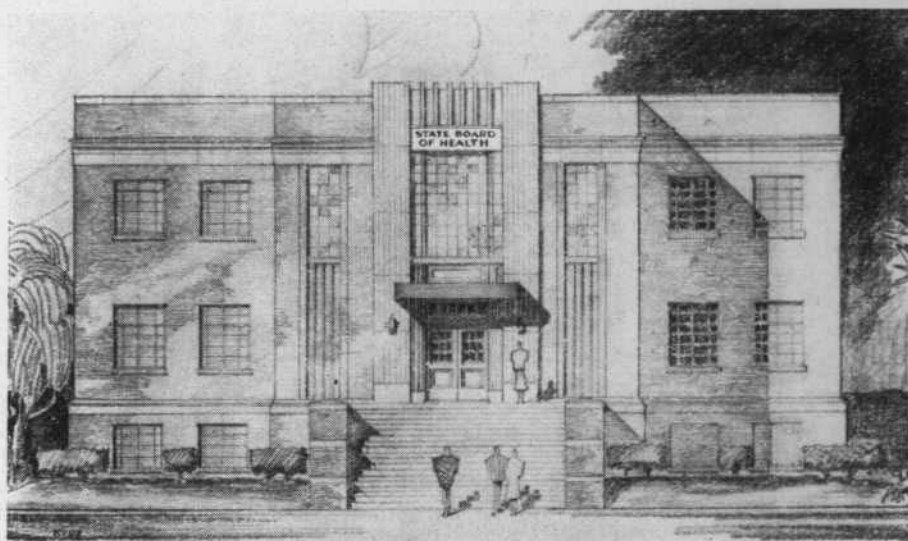
W. A. MCPHAUL, M.D.
State Health Officer

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SEPTEMBER, 1937

No. 9



NEW STATE BOARD OF HEALTH BUILDING FOR VITAL STATISTICS AND ADMINISTRATION
Designed by Roy A. Benjamin, Architect

ENLARGED QUARTERS FOR THE STATE BOARD OF HEALTH

W. A. MCPHAUL, M. D.
State Health Officer

For a number of years before the great yellow fever epidemic in Jacksonville in 1888, the Florida Medical Association had been advocating the establishment of a State Board of Health. A law permitting this had been enacted in the Legislative session of 1885, but it was not until

1889, at a special session of the Legislature, called by Governor Fleming for this purpose that the law was put into effect and the State Board of Health organized. At this special session it was decreed that the headquarters of the State Board should be located in Jacksonville.

In the spring of 1889 the executive offices of the Board were established in the Law Exchange Building, at the corner of Market and Forsyth Streets, only one small office room being used. Some few years later the office was moved to the sixth floor of the Gardner Building on Bay Street between Main and Laura. The Board had three rooms at this time, each about fifteen feet square.

In 1901 this building was totally destroyed in the great Jacksonville fire. Every record of these first twelve years of the State Board of Health was lost. For the next few months office space was obtained in the Everett Building, now the Everett Hotel. In 1902, the Board moved into the new Dyal-Upchurch Building. When the Laboratory was established in 1903, additional room was necessary, and space was rented in the L'Engle Building at the corner of Bay and Main Streets for the Laboratory. The separation of executive offices and the Laboratory was far from a satisfactory arrangement but it was not until 1909 that the possibility of a State Board of Health Building seemed at all near. During this year the city of Jacksonville gave to the Board, a large and very valuable plot of land upon which to erect permanent headquarters. The plot comprised about two and one-half acres on the south side of Hogan's Creek at the intersection of Second and Julia Streets. On this land the first permanent building of the State Board of Health was completed in 1912, and here the administration offices are today. The growth of Florida and the continually widening scope of public health work in this State as in all States has long since demanded additional space in the building erected in 1912. Some years ago it became necessary to provide more room for the Bureau of Vital Statistics. The law requires that the records kept by this Bureau, records of births and deaths, marriages and divorces, be stored in fire-proof vaults. The Bureau of Vital Statistics

has therefore been occupying large rented space in the Florida Theatre Building for the last several years.

In 1936, the State Board of Health was enabled to obtain WPA funds for the erection of two new additions to the original building. The first addition was completed in April of 1937, and houses the Laboratory, some departmental offices, the auditorium and library. The second and larger addition is now being built. With the building of this addition, it is planned to have the front entrance changed from Julia Street to Pearl Street, which is now a through thorofare as Julia Street was when the old building was built. The Pearl Street entrance will lead to the main floor. The information desk and the telephone switchboard will be located on the left of the entrance, and on the right will be stairs leading to the executive offices on the floor above. The entire main floor and part of the basement will be used by the Bureau of Vital Statistics. Ample vault space is provided for the Vital Statistics records. The vault is two stories high. The entrance to the vault will be on the main floor, and also space for current records. The larger vault will be connected to this floor by a stairway and will be used for storage of old records.

The offices of the Bureau of Sanitation will be located on this ground floor also. Here space will be ample for the work which this Bureau does and for the housing of their records on sanitation work in the State.

The offices of the State Health Officer will be on the second floor. Adjoining these, on the north end of the building, will be three offices for Bureau Directors. The south end of this floor will contain the office of the Auditor and a vault for the storage of financial records.

The approximate total cost of the new addition will be seventy thousand dollars. Much credit is due the 1937 Florida Legislature for its interest in public health evidenced by an appropriation of eighteen thou-

sand dollars to add to the twelve thousand dollars already in State Board of Health funds, in order to match the forty thousand dollars given toward the new building by the WPA.

The State Board of Health feels that it has been particularly fortunate to obtain WPA funds at this time for assistance in building these much-needed additions. It is felt that the money spent will be more than refunded in a few years because there will be no need to pay the large rental heretofore necessary for offices of the

Bureau of Vital Statistics and because of the added efficiency possible in having all departments of the Board under one roof. All labor is furnished by the WPA as well as the substantial portion of the building funds.

When the building is completed, it is believed that Florida will have State Board of Health quarters second to none in the country. Public health is advancing rapidly and we are proud of this new building which will stand as a symbol of public health work in Florida.

TUBERCULOSIS AND INDUSTRY

A. J. LOGIE, M. D.

Director, Division of Tuberculosis

Tuberculosis and industry are terms signifying specialized fields, which to most of us, seem so distinctly distant from each other, yet, when we consider that this major disease threat of humanity takes its heaviest toll in those early years when young people are establishing themselves in their life work, we realize that industry cannot help being affected to a greater extent than we comprehend.

Because of the waste involved in the protracted disability, it seems worthwhile to determine the economic values involved. In industry, where everything is measured in terms or money, the cost of tuberculosis is naturally of interest.

Recently, at the Eastman Kodak Company, a study of 100 tuberculosis cases, selected at random, occurring among its employes was completed. This study covered a period of 10 years. The chief object of this study was to call attention to the economic aspect of tuberculosis and by so doing to focus renewed attention upon the importance and necessity of dealing with the problem more accurately.

The conclusions drawn from this study are the following:

1. The average time lost due to tuberculosis equals 595 working days, or 2 years and 15 weeks.

2. The total cost in caring for these 100 cases equals \$406,000. This includes cost of diagnosis, treatment, loss of time from work and examination of contacts.

3. The average cost per capita was \$4,600. Of this cost the largest item was that of wages lost and sick benefits paid during disability.

4. Private agencies bore 79% of the cost incurred, of which the family bore 63%, public agencies, tax supported, bore 21%.

5. The average age of the entire group at the time of diagnosis was 31 years: for women 26 years and for men 37 years.

The only way to reduce the tremendous cost of tuberculosis is to prevent the disease or arrive at an early diagnosis. We know that the earlier the case is diagnosed, the greater is the promise of cure and the shorter is the period of disability. The expenditure can be cut to one-half of what it is under the present system.

The average duration of tuberculosis is about 5½ years and the average cost per case is approximately \$3,000. In Florida, last year, there

were over 500 deaths from tuberculosis in the 20- to 45-year age group—the wage earning period of life. On this basis, excluding the new cases which were reported in the same period, the cost amounts to \$1,500,000. It is a very conservative estimate to say that there are 5 frank cases of tuberculosis, in this age period, for every death. This gives us an approximate total of 3,000 cases of tuberculosis in the wage earning period. If we take the estimate of \$900 as the average yearly wage earning, the loss in wages alone would amount to \$2,700,000 per year and this is exclusive of diagnosis, treatment, after care and the many other items that may enter into cost consideration.

Tuberculosis is, we may say, a disease which only the rich man can afford to have from a financial point of view. However, paradoxically enough, it is the poor man who contracts it in the majority of cases. In 1930, in the city of Syracuse, New York, having a population of 200,000, deaths from tuberculosis were responsible for 50% of the broken families in the relief group as compared with 31% in the non-relief group. In one year \$332,000 were spent in health and relief services for tuberculosis. In Philadelphia, 30% of the 112 families on relief had a tuberculosis problem as the immediate cause of their relief situation.

I believe it would be interesting to quote from a comparative study of the mortality rates of the socio-economic classes which I saw recently in chart form.

The lowest column shows a death rate of 26% for professional men; that is, doctors, lawyers, preachers, teachers and others. The next group is that of proprietors, managers and other business officials with a death rate of 43%. In the next higher column, were rated agricultural workers, with a death rate of 46%; clerks and kindred workers came next with a rate of 66%; skilled workers and foremen who constitute a fairly stable class have even a higher rate of 72%. The next in the ascendancy were

semi-skilled workers, with a death rate of 102%, and the highest column consisted of non-skilled workers with a death rate of 185%, which is more than seven times that of the lowest white collar group. This high rate is probably due to the lack of income and social insecurity among non-skilled workers. They constitute the largest section of the non-employable as well as the non-employed persons. This group, with its low income, lack of education, with environmental conditions at their worst, furnishes the largest portion of the tuberculosis problem among men.

It is unfortunate that tuberculosis does not usually show itself until it is fairly well advanced. It is a known fact that less than 25% of cases are diagnosed at an early stage.

I cannot too strongly stress the importance of diagnosing tuberculosis at an early stage where prompt treatment by modern therapy will bring about rapid convalescence and early rehabilitation with minimum cost to industry, to the community and to the family. Early diagnosis can be made by means of the tuberculin test and the x-ray. The tuberculin test will tell us whether or not the germ has entered the body. If it has, the x-ray will show if any damage has been produced in the lungs, long before any recognizable symptoms appear.

Many of the larger industrial institutions have inaugurated a program of periodic investigation of their employees by these means. In Florida, an anti-tuberculosis program is in the process of being inaugurated. However, it will be limited to high school children, contacts and suspected cases of tuberculosis. It is hoped, that in time not too far distant, we shall be able to include in our program certain industrial groups throughout the State. However, industry must become aware of this major problem and safeguard its interests by insisting upon the tuberculin test and x-ray of its employees as an integral part of the customary medical examination.

Upon the basis of a statistical study made in Florida some years ago, it was estimated that each tuberculosis death costs Florida an average of \$10,000, which for approximately 1,000 deaths (occurring last year) runs the loss to the State to more than \$10,000,000 by comparison with small annual costs for adequate care for these same persons.

Dr. Louis I. Dublin, statistician for the Metropolitan Life Insurance Company, has estimated that the value of an adult male to the community averages about \$21,000. This includes the cost of educating him, safeguarding his life and property and includes his earning capacity and other factors which make him a financial asset. With this as a basis, we may assume that each life lost from tuberculosis in Florida, all ages and sexes, represents an average loss of approximately \$10,000 which, multiplied by 1,000 will amount to \$10,000,000.

We must realize that an adequate expenditure of money in early diagnosis and treatment in tuberculosis is a paying investment. It is obvious that tuberculosis is a costly disease

and that it takes its deadliest toll in the early stages of earning a livelihood, when an individual can least afford to be idle and pay the cost of a protracted illness.

It takes its heaviest toll, too, not in old age nor in childhood, which are relatively non-productive periods, but in young manhood and young womanhood. It still lays upon society a tremendous burden for the care and relief of those who cannot provide facilities for themselves. It still exacts a tremendous toll from industry and industry may be sure that it is paying the cost directly or indirectly, for this loss. Our communities must realize that millions of dollars can be saved to the State if they will help bring tuberculosis under control, but the prevention of tuberculosis costs money just as does the prevention of fire or the prevention of crime. If it is worthwhile to spend two to five dollars per year per capita for police protection or fire protection, is it not worthwhile to spend half that amount for health protection and for freedom from the continued loss caused by tuberculosis?

"PEOPLE LIKE POISON"

E. C. GEIGER, D. D. S.

Director, Bureau of Dental Health

High speed living is a very potent form of poison to the human system. What does this have to do with dental health? A fundamental requisite to good dental health is nutrition, and nutrition results from proper digestion and assimilation of a good diet. Stories are related of grandfather passing away at the age of 87 with all his natural teeth in a sound condition. "He didn't have a single cavity or filling and no pyorrhea." Why?—let us analyze his environment and living habits and diet. First, he al-

ways took his time. Grandfather wasn't a man to be hurried; he was methodical and deliberate; no fast automobiles and other modes of transportation to excite him. He retired early and arose early, regularly. His limited use of stimulants was considered a luxury on special occasions. They were not mandatory to a fast tempo of living. He took time to live and he ate to live. A simple but substantial diet, probably home grown, was enjoyed daily in pleasant, quiet surroundings with

plenty of time. He probably took a few minutes to rest after meals, too. He didn't toy with a cute salad; if the meat was tough, he attacked same with strong and healthy teeth and with a vengeance, and was rewarded gums. Today, a tough beefsteak is sent back to the butcher, or he is given an earful of verbal venom. A mid-day sandwich and soft drink would have insulted grandpa. If asked for his dietary formula, he might have answered, "eat what you want, when you want it, but not all that you want."

His serene and sensible mode of living did not require continual use of antacids, laxatives, and cathartics. He didn't worry about his waist line, and grandma didn't care a hoot about a reducing diet, either. Their design for living then possibly wasn't any different from today, but the problem was combatted differently. Certain strata of modern civilization desire to "pull the wool over their eyes," in an attempted subterfuge to health, happiness and an enjoyable existence—even their wool has a certain amount of cotton in it. To transpose grandfather's formula to today, we might say, "eat the necessary things first, and then the things you like." We would soon discover necessary foods are enjoyable.

The stomach is more sensitive to excitation than a camera lens is to light. A laboratory experiment was conducted which illustrates the importance of a pleasant environment and serene disposition. A cat was allowed to rest peacefully for several hours in a small cage; he was then given milk and barium meal; the cat soon fell asleep. A fluoroscope was focused upon the cat's stomach, and this part of the digestive tract appeared to function normally. A barking dog was brought into the room which awakened the cat. The cat's stomach contracted and appeared to

go into convulsions; all apparent digestion stopped. This was due, of course to fear. Fear is one form of nervous reaction resulting from a state of mind. "The onset of symptoms attributed to intestinal stasis has been traced several times to bereavement, or some other physical cause," according to the observation of Dr. Langdon Brown of England. He added, "with the removal of the cause, or the healing effect of time upon grief, the condition appeared to clear up. Some of the worst cases occur in people who have no employment or no object in life. The acquisition of a definite rationale for existence, whether pleasant domestic relations, an absorbing profession, or even a satisfactory hobby, will have a most remarkable effect on the symptoms of this condition."

A prominent business man said, "success or failure is caused more by mental attitude even than by mental capacity." He referred to business, but his excellent philosophy might be adapted to matters pertaining to health. Self preservation is one of the original laws of nature. The human body does become somewhat conditioned to constant abuse, but the power of compensation is limited when forced through unnatural conditions. The functional disturbances of the alimentary tract may be associated with sepsis, resulting from any dental lesion. The reverse may be true in the oral cavity which will quickly demonstrate the effects of an alimentary disturbance. Thus, a vicious cycle may be produced if the common origin is not discovered. Therefore, the possible psychic element in the causation is to be considered an important factor.

The mouth reflects malnutrition and deficiency diseases in the early stages. The teeth and gums suffer, become infected and will offer a source of poison to any part of the human body that has room for it.

THE PREMATURE INFANT

R. N. JOYNER, M. D.

Director, Bureau of Maternal and Child Health

By definition, we classify an infant as premature if its birth weight is five pounds or less, and if it is under nineteen inches in length, irrespective of the estimated period of pregnancy. Most twins born at term are included in this classification. There is an old adage that an infant born at seven months has a better chance of survival than one born at eight months. This statement has no foundation in fact. The premature infant, born of healthy parents, and without congenital defects, who survives the first few days of life, is entirely capable of complete and perfect development.

Children born fifty years ago had a life expectancy of about 39 years. The life expectancy of children born in 1930 was 61 years. The saving of infant lives is largely responsible for the increased expectation of human life. The mortality rate in children who are born prematurely or who are very small at birth has been estimated at from 34 to 42 per cent. The proper management of the premature infant will materially reduce this alarming death rate.

The clinical picture presented by these babies varies greatly with the degree of prematurity. Usually the body is limp; the skin soft and transparent; practically no subcutaneous fat is present; the respiratory movements are irregular, and the whole appearance is one of torpor. This respiratory irregularity is frequently as prolonged as to be scarcely perceptible for several seconds. The muscles of the mouth and tongue may be so weak that sucking is impossible. These symptoms are all seen in definitely immature infants, and they vary in severity in every case.

In general there are four points to be remembered in taking care of premature infants.

First, the heat regulating mechanism of the premature is not well developed. Even slight exposure causes a marked fall of temperature. Often times the temperature will vary as much as 4° or 5° F., within a few hours. The premature must have artificial heat supplied to him, but cannot dissipate excess heat by more rapid breathing and perspiration. Over-heating must therefore be guarded against. Too much artificial heat is as harmful as too little, and a constantly subnormal temperature is a danger signal. The best body temperature is from 98° F. to 100° F. Room temperature should be about 75° F., with the humidity between 50 and 65. The infant who quickly regulates his heat producing mechanism has a better chance of survival than one who presents wide variations.

The premature must be clothed properly, kept in a warm environment and not exposed to ill-advised bathing. The clothing should provide against the loss of body heat, and yet it should be so made that it could be changed without undue chilling. Bathing should not be done too often, and only a portion of the body should be exposed at a time. It is well to know how much the baby weighs from day to day, but weighing only once in three days is enough. The scales should be covered with a warm blanket and carefully balanced before the infant is undressed.

The second important consideration in the care of the premature is the prevention of infection. Whether a premature is more susceptible to infection than a full-term child or an adult is open to question, but true it is that even mild infections, such as a simple cold or impetigo, commonly called "Florida sores," frequently start a series of events that have a

fatal termination. The premature should be kept in a room by himself, and no visitors should be allowed to enter. The nurse should be the only person to handle the baby, and she should wear a mask and gown. If the nurse presents any sign of a cold or other respiratory infection, no matter how slight, she should be relieved of duty.

The capacity of the stomach of a premature infant is small; the motility of the intestines is impaired, and the absorption of food is poor. The food requirements of the premature cannot be measured on the same basis as those of an average-sized child. The premature requires larger amounts of proteins and minerals because of his more rapid growth. He is, for instance, more likely to have rickets and therefore needs more cod liver oil and needs it sooner than a normal infant. Feeding at too frequent intervals may lead to vomiting. The diet must be sufficient to furnish the special requirements, yet it must be small in amount and easily digestible. Every infant, whether premature or

full-term, should be under the care of a competent physician.

Breast milk is unquestionably superior to any other, but frequently a mother delivered prematurely has little or no secretion, and oftentimes the infant is too weak to nurse. Breast milk is easily digested, and usually furnishes all the food value required. If the premature, for one reason or another, cannot nurse he can be given one of several dry milk formulas. One should never attempt to feed a premature without consulting a physician.

The fate of the premature is in the hands of his attendants, and whether he lives or not depends upon the care he receives. By the time he weighs 6 pounds he may be treated as a normal baby of that weight. He should gain from 5 to 7 ounces a week. Any premature who progresses in that way will reach as complete and normal development as a full-term infant will. The parents' part in his development is in providing him with adequate nursing, care and competent medical service.

SHORT COURSE FOR NURSES

RUTH E. METTINGER, R. N.

Director, Bureau of Public Health Nursing

Camp Roosevelt on Sunday, July 18th, was a busy place as nurses to the number of 124 arrived from all parts of the State to register for the Short Course for Registered Nurses conducted there July 19th to the 24th by the School of Adult Education of the University of Florida. Cooperating in the Short Course were the Florida State Board of Examiners of Nurses, and the Florida State Board of Health.

A spot map of the State would have shown nurses from Pensacola to Miami, along the gulf coast, up the east coast, and dotted through the center of the State.

Camp Roosevelt offers an ideal location for such a course as it provides both the freedom of camp life and the comforts that are sometimes

lacking in a camp. The officers of the School of Adult Education spared no effort in arranging the details of the course to make it most effective and stimulating.

The instructors were Miss Ruth A. Heintzelman, R. N., Public Health Nursing Consultant, United States Department of Labor, Children's Bureau, Washington; and Miss Myrtle Hodgkins, R. N., Teaching Supervisor of Medical Nursing, School of Nursing, University of Minnesota, Minneapolis. While Miss Hodgkins brought a background of hospital experience to her subjects she presented them in such a way as to be readily applicable to public health problems.

Miss Heintzelman outlined through her subjects the expanded program of the Children's Bureau which has

been made possible by the use of Social Security Fund, and discussed the newest developments in public health nursing, particularly in the rural field. She devoted one lecture period each to "Rural Public Health Nursing," "The Maternity Nursing Program," "Infant and Preschool Nursing Program in a Rural Area," "New Emphasis in the Rural School Health Program," and "Public Health Nursing Service in a Rural Communicable Disease Program." On the last two days of the course she presented "The Crippled Children's Program in Rural Public Health Nursing Service."

Miss Heintzelman told the nurses that Rural Public Health Nursing includes all points of a generalized program, particularly in reference to mothers and children. She emphasized the need of careful planning of the program and pointed out that "lack of time" may be due to poor planning. She stressed the value of the group conferences as a means of health education and brought out the point that a few mothers attending straight through a class or conference are better than many attending irregularly. She mentioned repeatedly the obligation of the nurse to give knowledge to the more privileged group who will disseminate it through the community. In connection with school health she spoke of the need to tie up parental education in the home with the health work in the school. She believes it is the nurse's place to assist the teachers in planning the school health program rather than to spend most of her time in dressing cuts and looking for illness. First Aid should be given by the teacher or pupil with regular care by the family physician. In discussing Communicable Disease Nursing, Miss Heintzelman devoted her time almost entirely to Venereal Disease Control. She believes that in this field, particularly, successful first interviews and time given to finding out the patient's attitude and gaining his confidence decrease the time needed for future home visits.

In the Crippled Children's Pro-

gram she outlined the types of cripples, the causes and treatments of special conditions and the nursing care in the home. In this connection she spoke of the help which the nurse can give the mother in the mental hygiene of the crippled child.

Miss Hodgkins gave one lecture each on "Diabetes," "Tuberculosis," "Social Diseases," "Sight Conservation," "Hearing Conservation," and two lectures on "Mental Hygiene." She brought facts in regard to the newer discoveries about the diseases and methods of treatment which were especially welcome to the nurse who has been away from hospital practice for several years. In addition to this she pointed out the social and mental implications tied in with the conditions discussed. Her lectures were packed with practical help which will take the nurses back to their notes again and again in the coming months.

Both lectures provided a wealth of references, many of which are available through professional journals and as reprints or pamphlets from various organizations.

Miss Heintzelman brought to the Short Course many of the books and pamphlets which she used for reference material. The State Board of Health provided a book corner and several publishers had a display of books interesting to nurses. The daily schedule allowed time for browsing among these books and more than one nurse was overheard calculating her budget to try to find some loophole to tuck in the purchase of a few of these much desired books.

The exhibits of the State Board of Health on Maternal and Child Health Sanitation, and Venereal Diseases drew many comments and inquiries as to how they could be obtained for use in communities.

At the end of each day's session moving pictures were shown including such subjects as Prenatal Care, Syphilis and Birth Injuries. Where these films were available for use by local groups information was given as to how they could be obtained.

FLORIDA CRAB MEAT

FRED A. SAFAY

Director, Bureau of Sanitation

As the result of the passage by the Board in 1935 of Rule No. 105 pertaining to the construction and operation of crab meat plants and the handling and shipment of the product, the crab meat industry has realized a steady, rapid expansion. Rule No. 105 was drawn up by the Bureau for passage when it was realized that the traffic in crab meat had increased to one of importance. The primary function of this regulation is for the protection of consumers and the industry itself, and as such covers the following items:

1. Construction of building and plant layout.
2. Safe, adequate and approved water supply and sanitary facilities.
3. Cleanliness of plant and personnel.
4. Sanitary handling of the product.
5. Regular plant inspection.
6. Certification of product when required regulation is met.
7. Action for non-compliance with rule.

At the close of the year 1935, there were 10 permitted crab meat plants operating in the State under the direct supervision of Bureau inspection, having met all requirements of the State Board of Health Rule. Since that time a steady increase in the number of crab meat plants has been noted and in all new installations sanitary requirements have been strictly adhered to. At the present time 36 approved and duly permitted crab meat establishments are operating throughout the State. Regular, periodic inspections are made of these plants by our State Sea Food Supervisor and his assistant and the manner of plant operation, handling and shipment of the product closely checked.

Upon the urgent request of a group of representative crab meat dealers the Bureau sponsored a meeting of all plant operators in Orlando during the

latter part of August. This meeting was well attended, only six plants being without representation, and resulted in the formation of the Florida Crab Meat Producers Association. The constitution of this newly formed Association states in part as regards purposes and aims, as follows:

"This organization is formed for the promotion of Crab Meat and Lobster Packers of the State of Florida.

"In order to become a member of this organization, a person, firm or corporation must procure license from the State Board of Conservation of the State of Florida and also be approved by the State Board of Health.

"The object of this organization is to cooperate with its members to the end that the industry will be benefited as a whole and also to further cooperate with the State and Federal Agencies that have to do with the promulgating laws and regulations on the status of the State and Federal government."

It is indeed gratifying to note the action taken by this group of Crab Meat Producers and their willingness to comply with rulings and statutes promulgated by governing bodies in order that a safe, sanitary product may be offered the consumer. The sole purpose of the newly formed organization is to insure the purchasing public that all crab meat offered for sale by certified dealers is safe for human consumption and the price asked standard in all sections throughout the State.

A recent survey, during which rigid inspections were made at all crab meat houses, was conducted by representatives of the United States Department of Agriculture cooperating with the State Board of Health, and at that time only one plant received a government rating of less than Class A. Since that time this plant has made the necessary improvements and corrections.

In conclusion let us urge that when

purchasing crab meat you insist on receiving certified meat from permitted crab meat establishments. This meat is offered for sale in properly marked cans to show State Board of Health permit number. In-

sist on seeing the can which will bear in lithographed form the lettering FLA—with serial number followed by the letter C—thus: FLA-3-C. Be safe, use only Certified Crab Meat from approved establishments.

LABORATORY NOTES

PEARL GRIFFITH
Bacteriologist in Charge

Eighty-eight animal heads were sent to the laboratories for examination for Rabies during the month of August. Fifty-five heads were submitted from the city of Jacksonville and Duval County, a slight increase over last month. Thirty were found to have Rabies. The majority of these were stray dogs sent to the laboratory from the city pound.

Three of the heads received were unfit for examination. One was de-

composed and the brains of the other two had been completely destroyed when the dogs were killed. When Rabies is suspected, care should be taken in killing the animal so that the brain is not injured or destroyed.

One hundred nine Antirabic treatments were furnished by the State Board of Health during the month. Forty-six treatments were furnished for use in the city.

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF AUGUST, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	2309	527	279	131	108	3354
Diphtheria.....	417	180	84	177	25	883
Typhoid.....	1673	283	138	105	41	2240
Malaria.....	1635	409	117	55	317	2533
Rabies.....	71	15	...	2	...	88
Tuberculosis.....	274	180	65	66	32	617
Gonorrhea.....	1374	458	154	306	89	2381
Kahn.....	9142	2524	555	2320	599	15140
Water.....	...	57	17	276	...	350
Milk.....	176	296	115	358	135	1080
Miscellaneous.....	1371	87	348	476	61	2343
	18442	5016	1872	4272	1407	31009
Specimen containers distributed.....						15304

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	33 Packages
Schick.....	740 Tests	
Toxoid.....	800 C. C.	
Typhoid Bacterin.....	5344 Treatments	
Vaccine Virus.....	1313 Capillaries	
Antirabic Virus.....	109 Treatments	
P. P. D. Tuberculin.....	100 test pkgs.	4 Pkgs. 1st strength
		4 Pkgs. 2nd strength
P. P. D. Tuberculin.....	10 test pkgs.	13 Pkgs. 1st strength
		14 Pkgs. 2nd strength

ALL REQUESTS FOR CONTAINERS AND BIOLOGICALS SHOULD BE
DIRECTED TO THE STATE LABORATORY, STATE BOARD OF
HEALTH, JACKSONVILLE, FLORIDA

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M. D., *Director*

PELLAGRA

Pellagra caused more deaths in Florida in 1936 than typhoid fever, diphtheria, whooping-cough, measles and scarlet fever combined. It is therefore of importance from a public health standpoint.

The tables below show total deaths and death rates by color, for the years 1917 to 1936, inclusive, and by color and by counties for the year 1936.

Deaths from Pellagra and Rates per 100,000 Population, by Color, Florida, 1917-1936

YEARS	TOTAL		WHITE		COLORED	
	Deaths	Rates	Deaths	Rates	Deaths	Rates
1936	133	8.1	56	4.8	77	16.2
1935	181	11.2	59	5.2	122	26.0
1934	230	14.5	88	7.8	142	30.8
1933	193	12.4	69	6.3	124	27.5
1932	199	13.0	67	6.2	132	29.5
1931	220	14.6	66	6.2	154	34.8
1930	238	16.1	85	8.1	153	35.2
1929	313	21.9	104	10.3	209	49.1
1928	290	21.0	93	9.6	197	47.4
1927	220	16.5	104	11.2	116	28.6
1926	130	10.1	48	5.4	82	20.7
1925	125	10.1	45	5.3	80	20.8
1924	100	8.4	43	5.3	57	15.2
1923	91	8.0	34	4.4	57	15.6
1922	104	9.5	48	6.5	56	15.8
1921	129	12.4	46	6.6	83	24.0
1920	111	11.2	45	6.8	66	19.7
1919	113	11.8	52	8.3	61	18.5
1918	184	19.7	77	12.7	107	32.7
1917	218	23.9	105	17.9	113	34.8

Deaths from Pellagra and Rates per 100,000 Population, by Color and by Counties, Florida, 1936

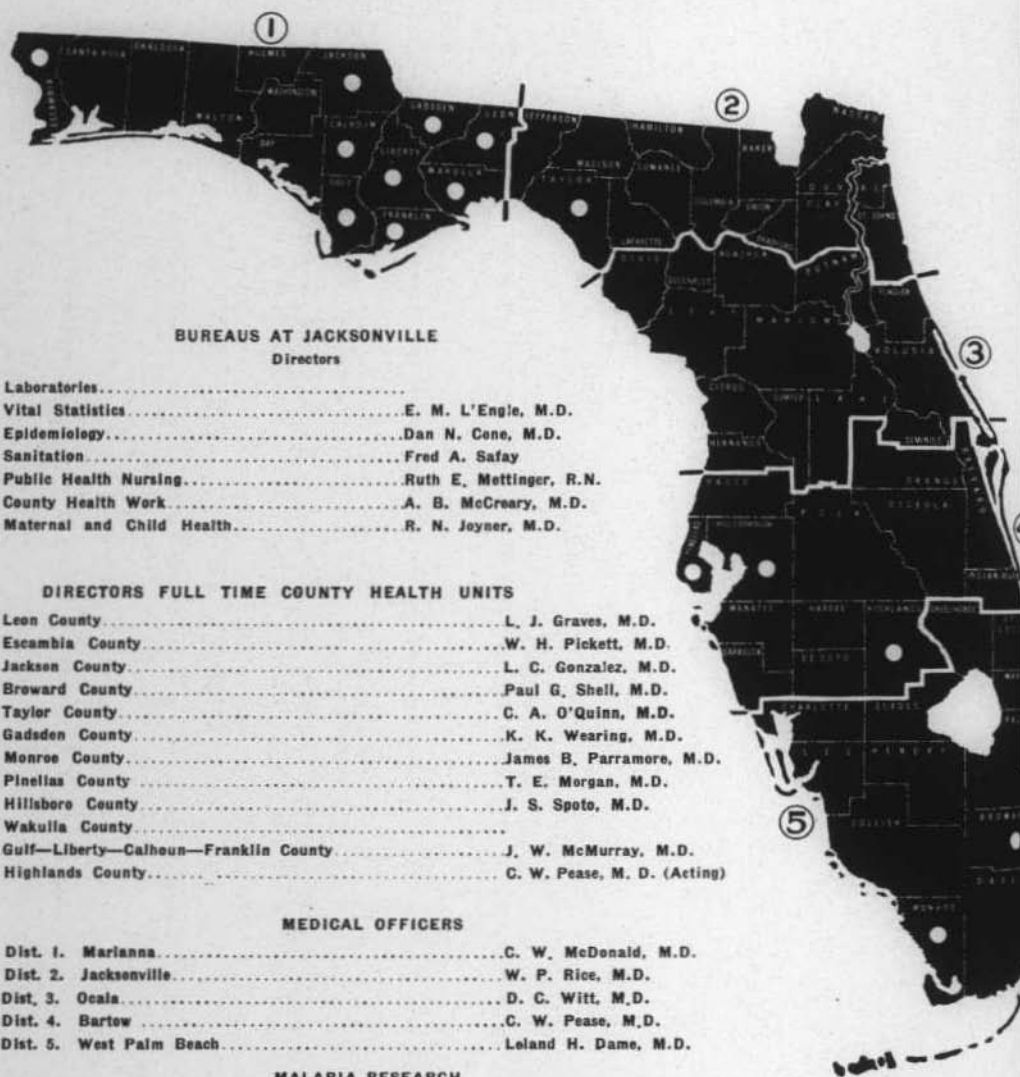
COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
State	133	8.1	56	4.8	77	16.2
Alachua	6	16.3	1	5.0	5	30.3
Baker	0	—	0	—	0	—
Bay	2	11.2	2	13.7	0	—
Bradford	0	—	0	—	0	—
Brevard	1	6.8	0	—	1	21.3
Broward	3	12.7	2	12.7	1	12.5
Calhoun	0	—	0	—	0	—
Charlotte	1	26.5	1	32.9	0	—
Citrus	0	—	0	—	0	—
Clay	2	28.2	0	—	2	105.3
Collier	0	—	0	—	0	—
Columbia	2	12.9	0	—	2	32.8
Dade	6	3.2	1	0.7	5	13.4
DeSoto	2	24.4	2	29.9	0	—
Dixie	0	—	0	—	0	—
Duval	23	12.9	5	4.3	18	29.0
Escambia	8	14.0	2	4.7	6	41.1
Flagler	0	—	0	—	0	—

Deaths from Pellagra and Rates per 100,000 Population, by Color and by Counties, Florida, 1936—(Continued)

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
Franklin	2	30.3	1	23.3	1	43.5
Gadsden (Ex.)	3	11.2	2	18.2	1	6.3
State Hospital	13	324.0	9	348.6	4	279.7
Gilchrist	0	—	0	—	0	—
Glades	0	—	0	—	0	—
Gulf	0	—	0	—	0	—
Hamilton	1	10.2	1	17.2	0	—
Hardee	1	8.6	1	9.3	0	—
Hendry	1	27.0	1	34.5	0	—
Hernando	1	17.9	0	—	1	62.5
Highlands	1	8.8	1	12.3	0	—
Hillsboro	4	2.5	3	2.3	1	3.3
Holmes	1	6.8	1	7.1	0	—
Indian River	0	—	0	—	0	—
Jackson	3	8.3	3	13.3	0	—
Jefferson	1	7.4	0	—	1	10.5
Lafayette	0	—	0	—	0	—
Lake	1	3.4	0	—	1	12.0
Lee	0	—	0	—	0	—
Leon	4	14.7	1	9.0	3	18.6
Levy	4	30.8	1	13.0	3	56.6
Liberty	0	—	0	—	0	—
Madison	1	5.7	0	—	1	11.1
Manatee	2	8.7	1	6.0	1	15.9
Marion	4	12.9	1	6.3	3	20.1
Martin	0	—	0	—	0	—
Monroe	0	—	0	—	0	—
Nassau	0	—	0	—	0	—
Okaloosa	1	8.3	1	9.0	0	—
Okeechobee	0	—	0	—	0	—
Orange	2	3.3	0	—	2	14.3
Osceola	1	10.3	0	—	1	44.6
Palm Beach	3	5.6	1	2.8	2	11.3
Pasco	0	—	0	—	0	—
Pinellas	2	3.1	2	3.9	0	—
Polk	8	9.5	6	9.1	2	11.0
Putnam	2	10.9	1	9.6	1	12.7
St. Johns	0	—	0	—	0	—
St. Lucie	0	—	0	—	0	—
Santa Rosa	0	—	0	—	0	—
Sarasota	2	14.2	1	9.5	1	27.8
Seminole	4	17.5	0	—	4	35.4
Sumter	0	—	0	—	0	—
Suwannee	0	—	0	—	0	—
Taylor	0	—	0	—	0	—
Union	0	—	0	—	0	—
Volusia	2	3.8	0	—	2	12.0
Wakulla	0	—	0	—	0	—
Walton	1	7.2	0	—	1	45.2
Washington	1	7.7	1	10.0	0	—

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



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Laboratories.....	
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Epidemiology.....	Dan N. Cone, M.D.
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Public Health Nursing.....	Ruth E. Mettinger, R.N.
County Health Work.....	A. B. McCreary, M.D.
Maternal and Child Health.....	R. N. Joyner, M.D.

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HEALTH NOTES

VOL. 29

OCTOBER, 1937

NO. 10

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WE HONOR IN THIS ISSUE



A. WM. MORRISON, Pharmacist
Member, Florida State Board of Health



FLORIDA HEALTH NOTES

Official Monthly Publication of the

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

Est. 1892

HON. FRED P. CONE

Governor of Florida

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VOL. 29

OCTOBER, 1937

No. 10

KIWANIS MARCHES ON!

A. B. McCREARY, M. D.

In developing cooperative county health units in Florida, along with the active support of local medical societies, the aid of the civic clubs has been invaluable. None have been more active than Kiwanis. The six Kiwanis Clubs of Lake County have made the establishment of a county health unit for Lake County their major objective. The Tavares Club under the capable leadership of President "Bill" Mare ably assisted by Kiwanians Colley, Sumner, Taylor, Moore, Lehmann and others, initiated the drive and soon enlisted the other five Kiwanis Clubs as well as other civic clubs in the county.

Recognizing that the Safety Patrol work, the aid to crippled children, the underprivileged child program and other Kiwanis activities for the improvement of the environment and the conservation of health and life are amply covered by an adequate full-time health service, it was natural that Kiwanis would accept the challenge. That it would be a worthy objective for the Florida District was obvious. If a worthy objective in the counties, then why not a worthy state project as well as one worthy of consideration by International?

Leon County (Tallahassee) having the oldest continuous cooperative

unit in the state made it logical for the Tallahassee Club to sponsor such a program before the Florida District Convention. After presenting the plan to Kiwanians Graves, Doyle, Davis and Meginnis of the Tallahassee Club, the writer was asked to present it to the club, which was done at their regular meeting October 5th. The plan was favorably received by the Club, and it was moved, seconded and passed that a resolution to that effect be drawn up and their delegates be instructed to present the following resolution to the Florida District Convention at St. Augustine.

"WHEREAS, Public Health work as represented by the Unit plan fostered by the State Board of Health is recognized by medical and public health authorities as being the best and most adequate form of health service, and

WHEREAS, As most of the Kiwanis projects pertaining to health, such as the safety patrol, underprivileged child and crippled children's work would be covered fully by such a move,

BE IT THEREFORE RESOLVED: That the Florida District make the creation of full-time health service through the unit plan under the su-

pervision of the State Board of Health one of the major projects of Kiwanis,

AND FURTHER: That such a plan be recommended and sponsored before Kiwanis International as a National and International project."

The resolution was unanimously adopted and Kiwanis has again set the pace. Kiwanis history as well as public health history was made at

St. Augustine, the old city, already clothed in the richest habiliments of early American history.

This move like many other Kiwanis activities will be far-reaching in its influence for the betterment of humanity. Its scope has no bounds and there can be no limits to its benefits.

MORE POWER TO KIWANIS!

THE SCHOOL CHILD AND TUBERCULOSIS

A. J. LOGIE, M. D.

Director, Division of Tuberculosis

The contagiousness and infectiousness of tuberculosis makes it a problem of great importance to those engaged in public health work. The menace to the health of the public is centered in the minute particle of life, known as the tubercle bacillus, which is the causative germ of tuberculosis.

The best method of tuberculosis control is to find the bacillus carrier and to keep him from infecting others. That tuberculosis kills more people between the ages of twenty-five and forty years than at any other period of life is a well known fact. However, between the ages of fifteen and twenty years, tuberculosis causes far more deaths than all the other acute communicable diseases combined.

Tuberculosis is peculiar in the respect that it usually does not reveal its presence until it has reached a stage so far advanced that the chance of cure has become problematical and the infection widely spread to others. Tuberculosis is curable if treatment is started early. Spread of the disease to others can be limited if the case is discovered soon enough. Consequently, we realize the importance of early diagnosis as the most effective factor in the control of the disease. If we wait for the characteristic symptoms to appear, we can be sure that the disease has been going on in the body for several months to two years. There is

a way to arrive at an early diagnosis. The tuberculin test and the X-ray are at our disposal. We intend to make wide use of such valuable adjuncts to the control of this terrible scourge.

In Florida, an Anti-Tuberculosis Program is being inaugurated by the Division of Tuberculosis of the State Board of Health. The children in the tenth to twelfth high school grades will be investigated for early tuberculosis by the tuberculin test and the X-ray. All children in these grades will be included in the program without charge, regardless of social or financial standing. The reaction to the tuberculin test and the X-ray findings will be reported to the family physician, so that he may be able to advise and follow-up the case and trace the source of the infection in the family. Already, several counties have been visited by the Tuberculosis Field Unit.

Cooperation of the public cannot be expected unless the public understands the nature and the significance of the work to be done.

The tuberculin test is an injection into the skin of the forearm of a colorless liquid. It is painless and absolutely harmless. Two days immediately following the injection, the physician interprets the reaction as negative or positive. A positive reaction signifies that the germs of tuberculosis have gotten into the body.

We must remember that although the germs may be in the body, most children suffer no harm. The entrance of the germ has been sufficient to give them a positive skin reaction, but, in most of them, their natural tissue defenses have put the germs under control so that no damage is done. Well over 90% of adults will show a positive tuberculin test. The test does not tell us when the germs entered or where in the body they are situated. In order to learn whether our natural defense mechanism has been strong enough to prevent the germs from causing permanent damage, it is necessary to have an X-ray picture of the chest made.

To put it briefly, the tuberculin test will tell us if the germs are in the body. If they are, as will be shown by a positive tuberculin test, the X-ray picture will reveal whether or not destructive disease is present. The tuberculin test without an X-ray is of little value—unless negative.

So if Jimmie has a positive tuberculin test, it does not mean that he has tuberculosis. The X-ray will be the deciding factor. Of one hundred children in the tenth to twelfth grades, approximately twenty-five will have a positive test; but only two out of a thousand will show X-ray evidence of actual tuberculous disease.

Children who have a positive tuberculin test should be taken to the family physician at least once a year for a physical check-up. If the child is in his early teens, he should get a nourishing diet, plenty of fresh air and sunshine, and a moderate amount of exercise. All physical defects, such as enlarged tonsils, adenoids, bad teeth, etc., should be corrected. If he loses weight, tires easily, or is sluggish, a visit to the doctor is most advisable.

If the X-ray shows evidence of actual damage to the lungs—the child requires active treatment for tuberculosis—isolation is essential, and measures to prevent the spread

of the disease to others in the household should be taken.

The question has often arisen as to whether it is better for a child to have a negative test. In answer I would say that the younger the child with a positive test the greater the possibility of the development of tuberculous disease.

The germ of tuberculosis is coughed up by the person having the actual disease. A child with a positive tuberculin test has been in direct or indirect contact with such a person.

It is unusual for the disease to develop after casual contact. Prolonged and intimate contact are conducive to the disease. This type of contact in the case of children is found either at home or at school.

A child is born free of the germ as tuberculosis is not inherited. The environment of a child under five years of age is strictly limited to his home. If he has a positive test where else but at home could he have picked up the germ?

As the child ages his field of activity increases so that extra-familial contact must be considered. The class room offers the greatest intimacy outside of the home—a school-mate, the teacher or some other school employee may be the germ carrier.

Tuberculosis is essentially a family disease. A school child showing a positive tuberculin test is sufficient reason for tuberculin testing and X-raying all the other members of that child's family in an effort to find the source of the infection. Once found, the contact with the germ carrier must be broken—preferably by isolation of the case. It is by no means uncommon for the germ carrier to be unaware of his condition. Tuberculosis is a misleading disease to the extent that any individual may have it without knowing it. However, the possibility of a cure diminishes in proportion to the duration of the disease. Many other persons who come into contact with this unknown or unrecognized case become potential

tuberculosis cases themselves. The tuberculin test in this way gives us a clue which must be followed to discover the germ spreader.

The high school student has attained the age at which the incidence of tuberculous infection is greatest. Special care of his health must be taken during this crucial period. All students who wish to participate in athletic activities, whether it be gymnastics or football, should have a preliminary tuberculin test and X-ray. The exertion necessary for these sports is a terrific strain upon a body which may be using up all its

reserve energy to repel a slowly advancing tuberculosis.

It should be customary for all school children to be tested upon entrance to the high school and college. The medical examination of teachers and all other school employees who have intimate contact with the children should include the tuberculin test and X-ray.

The child of today is the father of tomorrow. We must maintain his health at a high level. This can be done and will be done, if all groups concerned unite in a common battle against the disease.

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M. D. *Director*

In HEALTH NOTES for September and October, 1936, there was published a very interesting report of a broadcast given under the auspices of Science Service. The broadcast was a dialogue on the subject "Why Register Births and Deaths?" The radio audience is certainly a very extensive one, but it is possible that the very people who most need to know why it is to their interest that the registration of births and deaths should be complete and exact, are in many instances those who may not be reached by such a broadcast. In order to reach this class of our population, particularly those residing in rural areas, the Bureau of Vital Statistics in cooperation with the Bureau of the Census, is mailing to every rural box holder and every post office box holder in post offices without delivery service, a pamphlet supplied by the Bureau of the Census entitled "Why Register," a letter explaining in some detail the process of registering births and deaths, and a postal card, which requires no stamp and is addressed to the Bureau of the Census, requesting reports of any unregistered births and deaths. This literature will be sent to something over 95,000 box holders,

and will reach, of course, a much greater number of people. We believe this will result in a better understanding among Florida citizens generally of the importance and value to them of complete registration of births and deaths.

Professor F. A. E. Crew, President of the Zoology Section of the British Association for the Advancement of Science, read a paper before a recent meeting of that Association, showing how much more dangerous it is to be a male than a female and that this unfavorable situation begins even before birth. The report of the Registrar General for England and Wales for the year 1935, shows that for every 100 girl babies who die before they are born, 110 boys die before birth. And although there are 106.5 boy babies born alive for every 100 girl babies, the boys die faster. There are more boys than girls until the later teens, but after 20, young women begin to outnumber the men and the ratio rises throughout life. The records of the Bureau of Vital Statistics show that in Florida for the four years 1933-1936, inclusive, for every 100 girl babies who die before birth 124 boy babies die.

SCHOOL LIFE BEGINS

E. C. GEIGER, D. D. S.

Director, Bureau of Dental Health

"Now is the time for all good parents, and true, to come to the aid of their dental health." All mothers and fathers want their child to be happy and healthy. This is apparent in the willingness of parents to make decided sacrifices to provide necessities of life. This instinctive feeling is expressed especially toward babies and small children who, because of their helplessness, are absolutely dependent on adult care. How often have we heard a mother, when her child is suffering from an accident or disease, express the wish that she might change places with the little sufferer. There are times during which the child's suffering is the result of parental carelessness, or neglect. Too often carelessness, or neglect, in caring for children's teeth causes unnecessary pain, discomfort and frequently serious illness.

This month finds thousands of new students just entered in the schools of our state. These are the beginners in the first grade. This is the material with which our teachers are to build the future generation. It is incredible, but true, that over 50 per cent of these children are defective in some form. Some of them with impaired vision, defective hearing, and others with body deformities, but the great majority of them will have defective mouths. A certain percentage of these children will have mouths laden with abscessed and decayed teeth, and they will be expected to compete with those who are normal. Their teachers, worthy and well qualified as they are, masters in their art, are expected to take the material we have to offer and build a generation of which we will be proud.

Late summer, or early fall, should be a period of physical check-up, and if necessary, renovation. A bill of health will induce normal physical development, promoting normal mental development. Tests prove

that children make faster progress in school if their mouths—and including tonsils—are healthy.

Diseased first teeth are just as harmful to the child as infected secondary teeth to the adult. Many degenerative diseases of middle life may be traced to retained infection, or lowered resistance, resulting from childhood dental disease.

The most brilliant teacher cannot impart knowledge to a potentially bright child who is suffering from a source of infection, poor digestion and a lowered resistance. Many cases of grade repetition may be prevented; this, too, is a decided economic factor.

Many children suffer from defective eyesight in varying degrees, which influences individual school progress. A case is quoted about a little seven-year-old girl who had lost her sight to the extent that she could not discern objects, but was able to distinguish light from dark. The family physician was consulted; he was unable to locate a definite source of infection, but was suspicious of the child's teeth and advised a thorough dental examination. The dental X-ray revealed several abscessed teeth which were removed. The bacteria found were cultured, emulsion made of them, and injected into rabbits. Within a few days most of the rabbits developed the same type of blindness from which the little girl was suffering. Later, on microscopic examination, the germs taken from the rabbit's eyes were found to be the same as those found in the child's teeth. With the cause eliminated, the child recovered her sight.

Some ear infections are traced to dental complications and respond to the removal of the cause in a satisfactory manner. It is estimated that the incidence of antrum infection from teeth is about 20 per cent.

Organic heart trouble in adults is

one type of disease which is commonly due to diseases of an infectious nature, usually contracted in childhood, such as diphtheria, typhoid fever and scarlet fever. Obviously diseases of the tonsils and teeth affect the heart. Many cases of heart murmur in children are the direct result of a focus of infection traced many times to infected teeth and tonsils. Today more cases of heart murmur are found in children of the first three grades in school, than ever before.

Frequent dental examinations will result in prevention of dental dis-

orders. To prevent is to avoid cure, and is always more satisfactory.

It has been said "Life begins at forty" and refers to pleasure and luxury. School life begins at six and includes an obligation and necessity with the child's entire future depending upon the physical and mental development during these formative years. It behooves every parent to prepare the child physically in order to delegate a fertile field for mental development to our capable school system. If these future citizens are to "begin life at forty," it is necessary to begin preparation now.

THANK GOD FOR LIP-ROUGE

Beyond noting that the uses of cosmetics like the uses of adversity are sometimes sweet and sometimes sour, our interest in the subject lagged until we discovered the affinity of lip-rouge for drinking glasses. Now we know that lip-rouge is really something this country needs. Those bright-colored splotches left on drinking glasses by persons unknown are a sign which all can understand. They signal danger ahead.

Was she blonde or brunette; tall, short, or squat; was she a harridan or dowager; demirep or debutante; was she forlorn or gay? The glass incarnadine yields no clue. But the mouth-print warns that other lips have pressed the glass that is about

to be pressed by yours. The virginal integrity of a paper cup is not to be claimed for such a glass.

Yet men too have drunk from glasses and they leave on them no visible mouth-print to mark the spot. We have no wish to hasten the day when men crowd women out of mirrors in order to apply make-up. But we do raise it as a question of privilege whether contamination from male mouths should be allowed to pass along from one person to the next, unseen, and unmarked. Thank God the broader half anyway leave incriminating evidence.

Reprinted from
Health Officers News Digest.

NINTH GORGAS MEMORIAL ESSAY CONTEST ANNOUNCED

Announcement of the contest has been made by Admiral Cary T. Grayson, Chairman of the Board of Directors of the Gorgas Memorial Institute. The essay contests have become an annual feature of the program of personal health education carried on by the Institute.

Participation is restricted to students throughout the country in the third and fourth years of high school.

The subject for this year: The Achievements of William Crawford Gorgas and Their Relation to Our Health.

The dates of the contest: October 21, 1937, to January 21, 1938.

Full information concerning the contest may be obtained from the Gorgas Memorial Institute, Washington, D. C.

OYSTER SANITATION

FRED A. SAFAY

Director, Bureau of Sanitation

The oyster season opens officially in Florida in October, but by special legislation in several west Florida counties oysters may be offered for sale as early as September.

To protect the industry as a whole and the consumer individually, the State Board of Health through this Bureau in 1932 passed the Board's first ruling to regulate the handling of oysters in the State. Previous to the passage of Rule 102 the U. S. Public Health Service Minimum Requirements relating to oyster sanitation was used by the Bureau as a standard. Rule 102 was drawn in accord with the Federal regulation. Due to changing conditions, increased production and improved methods, it has been necessary to have the oyster regulation modified several times since its passage—the most recent modification to the Rule being approved and adopted by the Board in regular session on September 22, 1937. All oyster houses operating in the State during the present oyster season will conform to the newly amended Regulation appearing as State Board of Health Rule 102-B.

As in the past, all oyster shipping establishments must meet requirements of the Regulation in order to obtain the necessary permit for operation and be assigned a code number for container identification. To protect the interstate shipments the U. S. Public Health Service is promptly advised concerning permits for certified houses. The code numbers issued to plant operators are stamped into the metal cans—and appear with the Certificate number preceded by the letters FLA-, thus FLA-16, etc.

Look for the "Certified Oysters Sold Here" sign displayed in your local market. This sign guarantees that the oysters you purchase origi-

nate from safe producing areas, and are produced in houses meeting all State Board of Health requirements operating under close Bureau inspection.

To assist the plant operators in equipping their houses for the coming season and to advise them concerning proposed modifications to the regulation, Bureau representatives attended a meeting of oyster house operators in Apalachicola on September 4. The meeting was well attended by representative oyster dealers, members of the Franklin County Health Unit, deputies of the State Board of Conservation, in addition to Bureau personnel.

Before adjournment, representatives of the oyster industry drew up for passage by the group, a set of minimum standards which will govern plant operation during this season. These requirements are in accord with State Board of Health regulations but in addition include items of specific interest and benefit to the local plant operators.

A point to be given special attention is the matter of health cards. All plant employees will be required to obtain health cards issued by a licensed physician. The matter of proper sterilizing solution and method of handling was further considered. The spirit of cooperation manifested by the industry in regard to proper handling and shipment of the product and the definite desire to comply with recommendations of the Bureau, assures the public that a safe, sanitary product will be offered by all of these plants.

The following is quoted from a statement made at the conclusion of the meeting:

"The net result of the meeting might be said to be the realization by the industry of the need for the production of a better product and the advertisement of such product

and plant improvement to the Trade and Consuming Public."

To date, October 4, thirty-two oyster houses throughout the State have received permits from the Bureau for operation this season. Lists of certified oyster houses are prepared by the Bureau weekly and copies sent to city and county Health Departments, oyster dealers in the

State and to Health Officers in adjoining States, as well as to the U. S. Public Health Service at Washington.

BE SAFE—purchase only Certified Oysters from properly marked—original—cans. Properly marked oyster cans bearing the letters FLA—followed by number will assure you that the product has received the State Board of Health approval.

THE NURSE AND COMMUNITY ORGANIZATIONS

RUTH E. METTINGER, R. N.

Director of Public Health Nursing

Nothing can be of more value to a nurse than an organization—an organization that is "pulling for her" and is truly interested in her work. And the best way to stimulate interest is to get the organization to do something constructive for the cause of public health. It is a queer phenomena that the more an organization does for the nurse, the more it feels obligated to her! In truth, it is because their interests and hers are so intertwined that they work for each other and build a finer standard of living.

Women's organizations have had a great influence upon the entire social order. They touch every phase of life from pre-school age to adult life through their interest in public health educational opportunity and domestic welfare. The neglect of schools and hospitals, clinics and maternity benefits, the improving of houses, the protection of children from assault and greed, and medical inspection for juveniles have been partially remedied.

It is a selfish thing to ask a Woman's Club to help equip a loan closet and expect them to have a comprehensive grasp of the situation, unless they have had an opportunity to have it clearly explained to them by someone intelligently acquainted with the subject. The nurse may be called upon to give a talk—and it is her duty to talk on every occasion

that is offered to her. It is also selfish to expect them to have a great interest in the affairs of public health, if the nurse never attends one of their meetings, nor is interested in projects dear to their hearts. Attending organization meetings will enlighten the nurse and will give her an idea of the organization's likes and dislikes.

Organizations are an index to a community. Through them the nurse begins to know the really worthwhile citizens—the ones who are looking ahead and planning for the future. She learns which phases of public health seem most important to them, and learns to prominently feature these phases in her monthly reports. An invitation to attend their meetings is not necessary; should the nurse mention her desire to attend one, they are usually pleased by her interest and will welcome her as a guest.

Most important of the community organizations to the public health nurse is the public health council. Many times, the success of this council depends upon the success of a public health nursing program in the community. For in many instances the nurse may be the only health representative in a community and cannot possibly interpret the real meaning and worth of a generalized program to all the people by her-

self. But, if her public health council is active and interested, each member becomes a disseminator of correct and valuable information concerning public health.

The Parent-Teacher Associations, Kiwanis, Rotary, and Woman's Clubs, Church guilds and societies—all can become valuable allies in her cause, regardless of different factions, cliques, creed, or color.

The Golden Rule, "Do unto others as you would have them do unto you," can be effectively translated into modern speech and applied to the cause of public health and com-

munity organization participation; for, as much interest as the nurse displays in community affairs, that much interest will be displayed in her cause—public health.

"It isn't what a man knows that matters, but how near to a straight line he can drive the processes of his mind; how near to a lean and useful muscle he can make that mind; how near he can come to lassoing a truth or method. No man should be judged by what he doesn't know; he should be judged only by how quickly and sensibly he assumes new duties."

LABORATORY NOTES

PEARL GRIFFITH

Bacteriologist in Charge

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF SEPTEMBER, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	2210	488	338	139	150	3325
Diphtheria	762	218	197	1771	203	3151
Typhoid	1173	269	98	117	23	1680
Malaria	1529	470	127	55	291	2472
Rabies	55	28				83
Tuberculosis	367	168	51	25	23	634
Gonorrhea	1244	483	167	290	107	2291
Kahn	10068	3498	673	2732	1133	18104
Water		67	13	276		356
Milk	191	271	152	412	182	1208
Miscellaneous	1409	130	294	436	39	2308
	19008	6090	2110	6253	2151	35612
Specimen containers distributed						16549

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	72 Packages
	5,000 units	37 Packages
Schick		3660 Tests
Toxoid		2310 C. C.
Typhoid Bacterin		4256 Treatments
Vaccine Virus		2660 Capillaries
Antirabic Virus		138 Treatments
P. P. D. Tuberculin	100 test pkgs.	7 Pkgs. 1st strength
		6 Pkgs. 2nd strength
P. P. D. Tuberculin	10 test pkgs.	36 Pkgs. 1st strength
		34 Pkgs. 2nd strength

PLEASE BE SPECIFIC WHEN SENDING REQUESTS FOR SPECIMEN CONTAINERS OR BIOLOGICALS. WE FREQUENTLY RECEIVE LETTERS THAT READ: "PLEASE SEND CONTAINERS," OR, "PLEASE SEND TYPHOID VACCINE." THE DOCTOR KNOWS WHAT HE WANTS BUT WE DO NOT.

MORBIDITY REPORT

DAN N. CONE, M. D.

Epidemiologist

Number of Cases Reported:

	1932	1933	1934	1935	1936	1937 (To Date)	TOTAL
Typhoid	266	183	129	169	93	77	748
Malaria	318	1011	1106	813	869	509	4626
Diphtheria	735	452	491	426	309	238	2651
Scarlet Fever	235	203	190	273	299	254	1454
Influenza	335	1267	65	662	587	463	3379
Whooping Cough	379	508	723	532	383	434	2959
Mumps	159	163	571	1101	1084	680	3758
Measles	217	1048	8115	1176	307	334	11197
Poliomyelitis	8	8	16	16	42	18	108
Meningitis	8	10	5	19	120	146	308
Dengue	2	5	2005	27	12	3	2054
Tuberculosis	591	661	603	523	627	591	3596
Syphilis	4063	4833	5198	4389	3287	6521	23093
Gonococcus	713	616	702	1207	1146	1469	5853
Hookworm	3076	4870	8984	6739	2211	4399	30277
Undulant	2	5	9	68	16	24	124
Tularemia	2	1	1	2	0	4	10

The morbidity records of the State Board of Health are fine assistance to the field health officer, when the reports are eighty per cent or better, correct. It designates the disease incidence at the various places in Florida and shows the health officer where his services are most urgently needed. On the other hand a report that is only thirty or forty per cent correct would be of very little assistance. Therefore, it is important that the doctors of Florida return the communicable disease report cards promptly and consistently. The morbidity report is no better than the doctors make it.

The above table based on cases reported to the State Board of Health, shows the number of morbidity cases reported from 1932 to 1936 and also for the first nine months of 1937.

In the September "Statistical Bulletin" of the Metropolitan Life Insurance Company, the death rates from causes showing the greatest percent decline between the period

1931 and 1935, reveal that childhood diseases occupy a prominent place among the causes of death that have recorded reductions; but a casual inspection of the above table will show that before the end of the current year, the morbidity records of these diseases will out number those reported for last year. The reason for this is not that childhood diseases are becoming more widespread, but the fact that these diseases are being reported more consistently by doctors and county health units. Other communicable diseases reported will also total more than those recorded for the preceding year.

The reason for this greater number of morbidity reports is the result of specific measures being employed on a large scale in suppressing communicable diseases having the greatest morbidity rates. The drives now being waged in Florida on malaria, tuberculosis, venereal diseases and hookworm are playing an important part in the increased number of mor-

bidity cases reported for 1937 to date, as the table will show.

County health units and doctors in charge of county welfare work also are aiding the efficiency of the morbidity reports. The fact that there were only three County Health Units in Florida up to the year 1936 will

show how the addition of eight Units during 1936 and two during 1937 to date has increased the number of morbidity cases reported, and will also show the importance of establishing County Health Units in the remainder of Florida's sixty-seven counties.

TULAREMIA, TRICHINOSIS, OR UNDULANT FEVER

DR. W. A. MCPHAUL, *State Health Officer*

There are certain diseases that are contracted in eating or handling meat from diseased animals, or in drinking raw milk from diseased cattle. While these are due to foods, they are more accurately described as "food infections" rather than as "food poisonings." Such diseases include rabbit fever (tularemia), contracted in handling diseased rabbits or in eating incompletely cooked rabbit meat; trichinosis and other diseases contracted through eating raw sausage or eating incompletely cooked pork; and undulant fever caused by drinking raw milk from cattle that have Bang's disease.

With the advent of wild rabbit hunting at this time of the year and with large shipments of rabbits arriving in the markets daily, comes a far greater prevalence of tularemia than is generally realized. Tularemia, which is the medical term for "rabbit fever," takes its name from Tulare County, California, where this disease was first observed. It is primarily a disease among rabbits, but human beings can "get" it, too, through infection of a cut in the hand or any open wound, however minute. The best protection against tularemia is to wear thick rubber gloves when handling and dressing all rabbits so that the bare hands won't come into actual contact with the animal. Also—make sure that the rabbit is thoroughly cooked.

While medical authorities say that there's no reason for a single case of Trichinosis ever, it is surprising how widespread this disease really is. In fact, there are probably several million persons in the United States in-

fected at some time or other in their lives with this parasite. Trichinosis is a dangerous parasitic disease which is commonly found in the muscle tissue of infested hogs, and like tularemia, it is contracted in eating or handling meat from diseased animals. Since Trichinosis is more commonly found in infested hogs, there is no reason for not eating pork—pork is an excellent food—and if *all* pork and pork products are cooked *thoroughly*, the average person, who cannot tell whether or not the raw pork is infested, will be assured that there is no possibility of "annexing" Trichinosis.

Another of the diseases contracted from handling cattle and transmitted especially through drinking raw milk, is undulant fever, which is sometimes called "Multa" fever. The best safeguard against this disease is to be sure that all milk used, comes from cattle free from disease, particularly the Bang's disease; and, as a special precaution, the milk should be pasteurized.

Some people die from these diseases or "food infections," and many more spend weeks and weeks, each year being ill from them. Others have "food infections" in milder form and never know exactly what's wrong with them, for "food infections" are often mistaken for typhoid fever, rheumatism, or even tuberculosis. Care in handling infected animals, properly cooked meat, and sanitary sterilization will eliminate "food infections," otherwise known as tularemia, trichinosis, and undulant fever.



RED CROSS WORK IN FLORIDA

Red Cross activity in Florida may be judged from the State's 40 per cent membership increase last year and by the fact that its citizens responded so generously to the flood relief fund appeal last January when Florida more than doubled its quota.

Time and again the Red Cross has come to the aid of disaster sufferers in this State—sometimes a large dis-

aster, sometimes a small one—but whatever the needs, they have been met by the Red Cross Florida chapters and the national organization. And, as was the case last winter, when other States are the scenes of disasters, the people of Florida are not hesitant to contribute to their aid.

Disaster, however, is only one

phase of Red Cross work. Let's consider the regular year-round service programs carried on by Florida chapters and the accomplishments during the past year. In this time Red Cross public health nurses in the State made more than 7,000 visits to persons ill at home and taught nearly 2,000 women and girls home hygiene and care of the sick. In first aid classes conducted by Red Cross instructors, 4,600 persons received this emergency training, making a total of 17,800 in the State who have completed such course. More than 1,200 persons were trained as life savers in the past twelvemonth, making 13,000 who have been similarly "water-proofed" in Florida since such classes were first organized in 1914.

That Red Cross chapters in Florida are on their toes is obvious as soon as one enters the State on U. S. Route No. 1, for from Jacksonville to Miami, the highway is dotted with highway first aid station signs. Florida's chapter officials, realizing that a large number of deaths and permanent in-

juries were resulting from accidents along the crowded thoroughfares, decided to do more about it than sit back and say, in hushed tones, "How awful!"

There are many other proofs that could be given showing Florida to be a good Red Cross State—such things as the program of pellegra prevention that has been so successful, the volunteer production of garments for needy persons. But those highway first aid signs are glistening along Route No. 1 and the Tamiami Trail winter and summer, standing proof that the State is wide awake and on the job.

All Red Cross work, of course, is supported entirely by the annual Red Cross Roll Call, held each year between Armistice Day and Thanksgiving Day. Your chapter needs your support to insure the continuance of this far-reaching program for community and State betterment. Join at the first opportunity as a practical means of showing your interest in such constructive work.

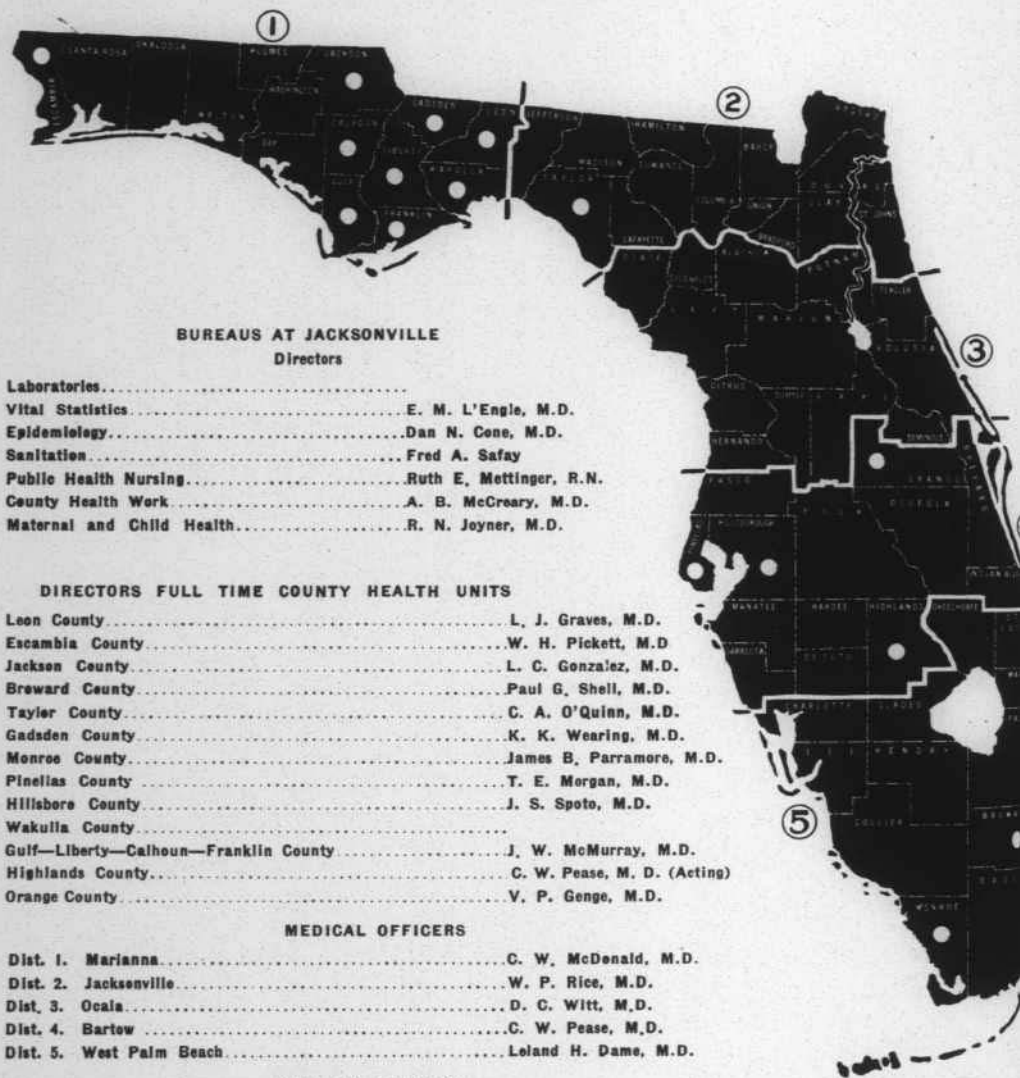
MISSISSIPPI VALLEY MEDICAL SOCIETY AWARD

The Mississippi Valley Medical Society offers a cash prize of \$100.00, a gold medal and a certificate of award for the best unpublished essay on a subject of interest and practical value to the general practitioner of medicine. Entrants must be ethical licensed physicians, residents of the United States and graduates of approved medical schools. The winner will be invited to present his contribution before the next annual meeting of the Mississippi Valley Medical Society (September 28, 29, 30, 1938),

the Society reserving the exclusive right to first publish the essay in its official publication—the Radiologic Review and Mississippi Valley Medical Journal. All contributions shall not exceed 5,000 words, be typewritten in English in manuscript form, submitted in five copies, and must be received not later than May 15, 1938. Further details may be secured from Harold Swanberg, M. D., Secretary, Mississippi Valley Medical Society, 209-224 W. C. U. Building, Quincy, Ill.

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



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Epidemiology.....	Dan N. Cone, M.D.
Sanitation.....	Fred A. Safay
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Dist. 3. Ocala.....	D. C. Witt, M.D.
Dist. 4. Bartow.....	C. W. Pease, M.D.
Dist. 5. West Palm Beach.....	Leland H. Dame, M.D.

MALARIA RESEARCH

Mark F. Boyd, M. D., Tallahassee.....	Rockefeller Foundation
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ENTOMOLOGY

W. V. King, Ph. D., Orlando.....	U. S. Bureau Entomology
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HEALTH NOTES

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WE HONOR IN THIS ISSUE



W. A. McPHAUL, M. D.
State Health Officer



FLORIDA HEALTH NOTES

Official Monthly Publication of the

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

Est. 1890

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State Health Officer

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THE CHRONICLE OF FLORIDA "HEALTH NOTES"

GEORGE GROSS, *Director*
Bureau of Health Education

When the June 1937 issue of the *Florida Health Notes* came off the press, forty-seven years had elapsed since this official publication of the Florida State Board of Health began its humble start in June, 1890 as a monthly bulletin of vital statistics. In 1892 this bulletin containing tabulated tables of vital statistics was enlarged to include "original" articles on sanitation, office correspondence, and "valuable extracts" from sanitary periodicals. Flattering communications had been received by the State Board of Health assuring them that the bulletin was appreciated; and in the Fourth Annual Report of the State Board of Health, Dr. Joseph Y. Porter, State Health Officer at that time, commended the editor of the bulletin, Mr. Frank B. Matthews, for this "appreciated" publication.

By the year 1893 the monthly printing of news items from the State Board of Health had so "increased in favor and in circulation" that the *Notes*, as titled by Dr. Porter, were "uniquely and appropriately styled *The State Board of Health in Monthly Print.*" The infant venture of the

State Board of Health had developed into a "yearling of good growth and promising vigorous constitution." Thirty dollars per month was appropriated to defray the printing and postage, and 1,000 copies were printed. The subscription price, which was to cover merely the cost of printing and mailing, was listed as fifty cents per annum, and it was not until January, 1915 that the *Florida Health Notes* was sent free of charge to the people of Florida. An additional amount of \$7.50 per month was appropriated in February, 1894, and the circulation of the *Florida Health Notes* was increased to two thousand copies—continuing "to grow in favor with the people of Florida."

Then in the year 1901, on the 3rd day of March, the calamitous fire which nearly obliterated the city of Jacksonville from the map, destroyed the building in which was located the office of the State Board of Health. *In a few moments the work of twelve years, in research, compilation and accumulation, was reduced to ashes.* The publication of the *Florida Health Notes* had to be suspended

after this great fire, and it was not until July 1906 that it was revived. At this time the publication was begun as a second issue, and the first issue became Vol. 1, No. 1 (Second Series), January 1906, a sixteen-page bulletin containing information on sanitary matters. The First Assistant at that time was responsible for a minor portion of the editorial work, together with the proof-reading and other details incident to its publication.

Again in February 1919 the publication of the *Florida Health Notes* was discontinued—this time because it was believed that they were not being generally read and that being limited in number, they were not reaching a sufficient number of the people of Florida. The State Board of Health sent out weekly news items to the weekly and daily publications of the State, and these items, according to the State Health Officer at that time, "were far in excess of that represented by the *Public Health Notes* when it is taken into consideration that practically every citizen of the State of Florida has opportunity of reading the newspapers and consequently the advice and information sent out by the State Board of Health."

But the people of Florida did not agree with his thought, and consequently, after repeated communications had been received, the publication of *Florida Health Notes* was resumed in March 1922. During the first month the mailing list increased from three thousand to four thousand, five hundred copies—including every town in Florida and every State in the Union. The circulation of the *Florida Health Notes* has broadened its scope since then and now reaches remote cities in all parts of the world.

An interesting phase in the history of *Florida Health Notes* was the economical desire of the State Board

of Health to reduce the cost of printing which had soared sky-high during the years following the Great War. The Multigraph Department of the State Board of Health took over the task of printing *Florida Health Notes* in March 1922, the cover only being printed by a publishing company. However, after a very short time the continually increasing circulation of *Health Notes* made it impossible for the Multigraph Department to take care of the printing, and in February 1923 the printing of *Health Notes* was placed in the hands of a publishing company.

During the three-year interim of the discontinuance of the *Florida Health Notes* and the revival of its publication, Dr. Stewart G. Thompson, who became director of the Central Bureau of Vital Statistics in 1918, published a bulletin titled the *Monthly Vital Statistics Reporter*, which contained tabulated statistical reports. When the *Vital Statistics Reporter* was discontinued in 1921, Dr. Thompson was named Editor of the *Florida Health Notes*, and he was untiring in his efforts to make this publication a success. Upon his recent resignation, the Bureau of Health Education assumed the responsibility of publishing the *Florida Health Notes*.

With this issue of the *Florida Health Notes* (which is in reality No. 11 of Vol. 40), the *Florida Health Notes* will have served the people of Florida forty years; and since its beginning one year after the establishment of the State Board of Health in Florida, and omitting the years after the great fire and the years during the aftermath of the World War, this official publication of the State Board of Health has unceasingly attempted to disseminate the latest developments in science and medicine, to present enlightening statistical facts, and to stimulate interest in the promotion of public health in Florida.

NINTH ANNUAL MEETING OF THE FLORIDA PUBLIC HEALTH ASSOCIATION

W. A. MCPHAUL, *President*
Florida Public Health Association

The Florida Public Health Association, long recognized as a very important agency in the promotion of a definite health program in the State of Florida, held its first meeting on the 1st and 2nd of May, 1930, when a large delegation of State Board of Health employees and representatives of several City Health Departments met at Gainesville, Florida, for "a round-table discussion of the problems of preventable diseases which are met from day to day by those actively engaged in this work." The question of a name for the organization was discussed to some extent, but it was not until March 9, 1931 that the organization was officially named the Florida Public Health Association. On that date, the former Public Health Association relinquished its name and became known as the Florida Tuberculosis and Health Association. On June 15, 1932, the Florida Public Health Association became affiliated with the American Public Health Association.

The purpose of the Florida Public Health Association was to assist in protecting and promoting public health, "provide for scientific advancement of its members and extend and develop public health movement in an association of public health workers."

The Florida Public Health Association provides for four classes of membership. (1) Active members: All persons professionally engaged in any branch of public health work in the State of Florida shall be eligible to membership. (2) Associate members: All persons in Florida who are not eligible to active membership, but who are sufficiently interested in

public health to desire affiliation with this organization shall be eligible to associate membership, which membership shall entitle them to all privileges of the Association except voting and holding office in the Association. (3) Honorary membership: Honorary membership may be conferred upon any person, whether or not a resident of Florida, who has rendered such service to the cause of public health as to entitle him to special recognition. Not over two honorary members shall be elected in any one year. (4) Corporate membership: Any board of health or other corporate health organization may become a member of the Association with the privilege of sending a delegate to the annual meeting. Eligibility of any organization applying for membership shall be determined by the executive committee.

From a humble beginning of fifty-four members the Florida Public Health Association has grown to the present membership of 226 members. The Ninth Annual Meeting of the Florida Public Health Association will be held December 6, 7, and 8 in Tallahassee, Florida, with headquarters at the Floridan Hotel. The writer, with the aid of a very able committee, has prepared an interesting program for the Ninth Annual Meeting, and he extends an invitation to all citizens of Florida who are interested in the health progress of the State of Florida.

For further information concerning the official program, address inquiries to Dr. W. A. McPhaul, Florida State Board of Health, Jacksonville, Florida.

THE DIVERSITY OF THE DIVISION OF ACCOUNTING

G. WILSON BALTZELL, Auditor

A casual observer cannot realize the many different transactions handled by the Division of Accounting of the State Board of Health, and it would take a long time for one to comprehend the scope of this division. But this has not always been the case. Let me do a little reminiscing to show how the Division of Accounting began to grow and expand.

When I first became auditor in January, 1932 there were only two of us in the office, myself and one assistant. We were able to handle everything very nicely and we kept comfortably busy. We made up the payrolls of various bureaus of the State Board of Health in Jacksonville and throughout the State, which were sent to the State Comptroller for payment. After the payrolls went forward, the monthly traveling expense accounts came in and each had to be audited and sent on to Tallahassee. After that the monthly bills for equipment and supplies and miscellaneous items were checked, vouchered, and when approved, sent to the Comptroller. Then warrants were issued and mailed here first, to be recorded and entered on our copies of the vouchers, and then sent by us to the payees. When those things were out of the way, we made up our monthly financial report of expenditures, and at the end of each fiscal year we made a complete annual financial statement.

In 1932 there were less than a hundred names on the payrolls including all departments and two County Health Units. Now there are about a hundred and fifty on the State Board of Health payroll alone, and twelve County Health Units have from four to thirteen members on their payrolls.

Affairs went along about the way I have described until the Social Security Act was passed by Congress in January, 1935. This doubled our work at the outset, and as time went

on and new programs got under way, the work was tripled. We put on one clerk, then another, and still we were so swamped that once when we were behind with our reports to the Children's Bureau, they took us to task. I complained about our pressure and was authorized to put on an additional clerk to be paid out of their funds.

All of this Social Security business means detailed and intricate accounting to Washington. The money is sent down by the Treasurer of the United States to the State Treasurer and deposited to our credit in separate accounts. This involves a tremendous amount of records, for now we have to have a payroll made up for the State Board of Health paid from our Legislative appropriation, another to be paid from the U. S. Public Health Service funds, and still another from the Children's Bureau funds. Besides this, we have payrolls which are paid from the Centralization of Marriage and Divorce Records, Registration of Doctors and Midwives, Certified Copies of Birth and Death Certificates, Drug Store Inspection, Division of Malaria Research, Special Study of Hookworm, and Malaria Studies—Escambia County.

The personnel of the County Health Units is paid from several sources, for instance, a medical officer may be paid partly from State funds, partly from County funds, and partly from U. S. Public Health Service funds. In other words, he will be on each one of the payrolls for proportionate amounts. A good many of the public health nurses in the County Units are paid partly from Children's Bureau funds, so their names appear on two payrolls at least. We have quite a number who are on three payrolls, viz: the County Health Unit, U. S. Public Health Service, and Children's Bureau.

A very trying phase of our work is

keeping up with the financial situation of each County Health Unit. We have to stay in behind some counties to see that they send in their allotments. Some of these are not always as prompt as they should be and have to be dunned—which puts us in the category of a collecting agency.

During the last two years the State has been divided into five districts—each composed of a medical officer, sanitary officer, nurse, and secretary. They all have their quota of bills to be paid, which they send in at various times. We do not wait to voucher them to the Comptroller once a month as we formerly did; now one girl's entire time is spent in checking and vouchering invoices as fast as they come in, and sometimes the volume is so great others have to help her.

A hectic time around this office is spent during the preparation of budgets. Every two years we have to make up budgets to be sent to the Budget Commission in Tallahassee, who go over them and make recommendations to the Legislature. Their regular forms would not answer this last time, since so many of our personnel are paid from sources other than State millage, as I have already mentioned. The proposed budgets have to be approved by the State Board of Health before being sent to the Budget Commission, and nine copies have to be made of each budget. If the Budget Commission reduces our requests or if the Legislature appropriates less than asked for, we have to revise our figures to come within the appropriation.

Then we have to make up the annual budgets for the U. S. Public Health Service and the Children's Bureau. Regional consultants from the U. S. Public Health Service and the Children's Bureau come down and work with us several days making up tentative budgets. After conferences with the regional consultants we set about making up the "proposed" budgets, basing figures on what we submitted to the State Budget Commission with certain changes on the advice of the governmental represen-

tatives. Each federal agency has its own form and its own way to prepare them—some more intricate than others.

Following the siege of preparation, the budgets are finally compiled, typed, and sent to Washington. Last spring there were so many ramifications and points at issue that Dr. W. A. McPhaul, State Health Officer, and I went to Washington ourselves to take the budgets. When we arrived there we found that our allotment from the U. S. Public Health Service had been reduced and in addition \$10,000 had been ear-marked for Anti-Mosquito work in Dade County and \$10,000 for training courses for medical officers, sanitary officers, and nurses. So, we had to bring the budgets back and start all over again.

In addition to all of these federal and state financial activities and special fee accounts, we also have three Rockefeller Foundation projects, one which has been going on in Tallahassee for six or seven years—The Division of Malaria Research—and two more recently added—the Special Study of Hookworm Disease and Malaria Control Studies—Escambia County. The Division of Malaria Research is financed solely by the Rockefeller Foundation, yet they deposit their funds with the State Treasurer and disburse them through the office of the State Comptroller on approved vouchers which we make up. The Special Study of Hookworm Disease is financed by the Rockefeller Foundation in cooperation with Vanderbilt University and the State Board of Health, and the Malaria Control Studies—Escambia County is financed by 50% Rockefeller, 25% State, and 25% Escambia County. All financial transactions pass through this office and quarterly reports have to be rendered to the Rockefeller Foundation in New York. Any unexpended balances have to be returned at the end of their fiscal year, which is the calendar year, just opposite to the State's fiscal year.

I might go on indefinitely enumerating various other affairs which we have to take care of in the Division

of Accounting—keeping up with the State Board of Health automobiles, checking all purchase orders daily and identifying invoices against them, keeping inventories up-to-date, reporting to the Insurance Commis-

sioner—space will not permit me to list them all, but if the casual observer will stay awhile with us, he will soon realize how diversified are the transactions of the Division of Accounting.

TOURIST AND TRAILER CAMP SANITATION

FRED A. SAFAY, *Director*
Bureau of Sanitation

The State Board of Health acting through its regulatory powers has adopted rules and regulations to cover various health and sanitary problems—one of the most important of these rules being to control the operation of tourist camps in the State of Florida.

With improved roads and increased automobile travel resulting in an ever increasing tourist camp population, it has been necessary from time to time to have modifications made to the initial requirements for tourist camp sanitation. The need for these amendments is clearly brought out in the fact that the number of camps in the State has steadily increased from year to year. A glance at the following table will indicate the progress of tourist camp operation as an industry in Florida during the past ten years:

1927-28	213	camps
1928-29	178	"
1929-30	163	"
1930-31	173	"
1931-32	215	"
1932-33	219	"
1933-34	225	"
1934-35	259	"
1935-36	313	"
1936-37	502	"
1937-38	(to date) 430	"

From the above it will be noted that there was a decided decrease in the number of camps during the 1928-29 and 1929-30 seasons. This decrease resulted when the heavy tourist travel following the boom peak lessened during those two seasons. Continuing further it will be seen

that a gradual, steady increase in the number of camps has followed each year—with the 1936-37 season establishing a record number. The 1937-38 season bids fair to equal or exceed the number for the preceding year.

What is meant by permitted tourist camps, what points are covered in the State Board of Health requirements for camp sanitation, and in what way is the Bureau of Sanitation responsible for the increase in number of tourist camps or for the improvement in type of the camps appearing on the highways throughout the State?

The State Board of Health Rule 91-A for the Control and Sanitation of Tourist Camps defines a camp to be "any place where three or more tents, tent houses, camp cottages, house cars or trailers are located." The 430 tourist camps in the State today provide a total of 3,685 cottages—the majority having 15 cottages or less and a few single camps having from 25 to 40 cottages each. Ninety-four of these camps accommodate trailers only.

The cottage tourist camp of today shows a decided improvement over the original cabin camp of ten years ago. There are all types and designs of cottages from the simple, single cabin providing only beds and lights in connection with community house sanitary facilities, toilets and showers, to the very complete cottages providing beds with Beauty-Rest mattresses, central heating systems, electric fans, telephones, and radios—accommodations to please the most critical tourist. However,

be the camp large or small with either plain or very elaborate cottages, the tourist is assured that the camp will be properly operated from a sanitary standpoint with facilities of the best approved type—IF its name appears on the regular list issued by the Bureau of Sanitation of the State Board of Health.

All permitted camps must have an adequate water supply of known sanitary quality; where municipal water supplies are not available, water is derived from properly protected wells. Water under pressure is required at all camps to serve the camp sewage disposal system where ample fixtures are provided every camp. For camps not accessible to the sewerage systems, septic tanks of approved designs form a part of the sewage disposal plan, providing flush toilets, showers and lavatories. In addition to satisfactory water and sewerage facilities, the proper disposal of garbage and household waste is required. Custodians are on duty at all times to adequately police the camps.

In addition to providing cottages many of the tourist camps accommodate trailers. The modern trailer has evolved from the original house car which was in vogue during the early days of tourist camping. These trailers are completely equipped with modern conveniences. As already

noted, there are 94 camps in the State operating strictly as trailer camps and the problem of properly equipping these camps or parks is of considerable concern to the State Board of Health.

The problem confronting the State is not only the comfort of the traveler, but the number of trailers attempting to park for any length of time at one location. Camp facilities for the use of trailers differ from the facilities provided for the tourist in the cottages. Trailers are equipped with their own sinks for kitchen wastes, and provision must, therefore, be made to provide proper disposal. The use of toilet facilities in trailers is discouraged, and ample toilets are being provided by the camps.

40,000 trailers appeared in Florida during the 1936-37 season, and as a result of hard, consistent work on the part of the District Sanitary Officers with the cooperation of the camp owners and operators, the trailer camp situation in the State last year was reported entirely satisfactory from a health and sanitary viewpoint.

For information concerning approved tourist and trailer camps, address the Bureau of Sanitation, Florida State Board of Health, Jacksonville, any city or county health department, or the Chamber of Commerce.

"FUGITIVES FROM A PAIN GANG"

E. C. GEIGER, D.D.S., *Director*
Bureau of Dental Health

There are many "pain gangs" in our state. The membership is drawn from school children, who are suffering from some form of dental disease. Grade repetition is usual among a "gang" membership, with classroom absence as a predominate cause. General poor health and listlessness are outstanding. These children are rendered more susceptible to common cold and other such communicable and infectious disease by a lowered resistance. There are certain diseases against which these

children may be immunized, but the most powerful weapon of preventive medicine is still a strong physical resistance.

Dental infection is not always spectacular as are certain dramatic diseases, except in the acute and painful stage. Satirically, this is the least dangerous time, but should be ample warning of future trouble. The most satisfactory avenue of escape from the "pain gang" at this time is dental correction. However, there is a method of temporary freedom that

many choose to follow. The acute stage may be suffered through, and when all life within the tooth has ceased, absence from pain is experienced. Many people think they are getting better, but in reality this is exactly when they are getting worse—painlessly. This is the chronic, or "blind abscess" stage; real damage is being done and will continue until corrected. This stage is painless, except for intermittent signals of pain by nature, or reversion to an acute inflammation of surrounding tissues, which subsides by drainage. The cause must then be removed if complete recovery is expected. If dental disease were always as obvious as a boil on the arm, or an infected cuticle of the nail, there would be a greater number "paroled" or "honorably discharged" from service in the "pain gang."

Dental infection in the chronic stage is usually absorbed into the body, either through the blood stream, or gastro-intestinally, with decided harm to other parts of the body. Dr. Chalmers Watson, of the Medical School, University of Edinburgh, Scotland, said, "Oral sepsis, including infected teeth, is among the chief causes of all chronic ill health associated with constipation and intestinal toxemia. Many cases of rheumatic fever may be attributed to this cause." It is at this chronic stage of dental infection that degenerative diseases of the heart, kidneys, eyes, lungs, or joints, begin to develop as a result of this infection. If these conditions are not reflected during childhood, they may be charged to middle age as a natural consequence of hav-

ing lived so long. A child in school suffering from an infection has a poor color, is underweight, usually has an irritable disposition, tires easily, and is never enthusiastic or interested. The Juvenile Delinquency Courts of today realize the importance of good dental health in guiding children to proper interests and building real characters. Frequent dental examination and early correction of slight defects will inhibit the growth of the ancient and dishonorable order of "pain gang."

There are many children in our state who have never joined a "pain gang," and as a result they are not fugitives. They have good dental health and are protecting it by learning early in life, that many of the best things in life can be had for nothing. It costs nothing to stand up and *breathe* properly—fresh air is free. It costs nothing to take *exercise* each morning. It costs nothing to *sleep* 10 hours each night. It costs nothing to *chew* food thoroughly. It costs nothing to *select* the food best suited for one. It costs nothing to *brush* the teeth *properly* twice each day. These things cost nothing, yet they will bring contentment and reduce medical and dental bills to a minimum. The high cost of living is discussed on every side, but the fact is overlooked that certain prerequisites to good health are free, and will promote a low cost of living. There are also a wealth of things in this world that money cannot buy. The greatest possession is health; the greatest ease is sleep, and the greatest treasure is contentment.

BETTER CARE DURING CHILDBIRTH

R. N. JOYNER, M.D., *Director*
Bureau of Maternal and Child Health

In our enthusiastic determination to reduce the 16,000 maternal deaths which occur yearly in the United States, we have been inclined to place too much emphasis upon prevention, in the form of prenatal care, and we have overlooked the more im-

portant subject of delivery. Not that prenatal care isn't important. It is. It is essential, but when we remember that half the total maternal deaths are due to childbed fever and that practically all of them occur at or following delivery, we can readily un-

derstand how much more important is adequate care at childbirth. Prenatal care is given in order that the physician may early discover any changes from the normal and correct them before more serious complications ensue. It serves to prepare the patient for a normal delivery.

The majority of women go through the entire period of pregnancy with little discomfort and without the development of complications that would endanger their own lives or leave them physically handicapped. And many of them do so without any prenatal care. A great many others however, successfully carry their babies for nine months only to become infected at childbirth and die miserably of childbed fever, or bleed to death from neglect. These patients might or might not have had the best of prenatal care. In other words, adequate prenatal care is no guarantee against death at childbirth. We have wasted our efforts entirely when, after we have carefully attended a prospective mother, guiding her safely through the dangers of pregnancy, we allow some ignorant or incompetent midwife, cultist or doctor to deliver and murder her.

Physicians who are properly licensed and properly trained in any of the numerous accredited medical schools all over the country render adequate prenatal care to their patients. They are entirely trustworthy and can be depended upon to safely attend a mother when the time comes for the birth of her baby. Other individuals professing to be capable of attending women during pregnancy and childbirth are little better than the followers of Hahne-mann who claimed that all diseases were due to psora, which means the itch. They are not sincere in their claim to give adequate medical service to any type of case, particularly to a condition so potentially dangerous as pregnancy and childbirth. They are interested solely in financial returns and have no regard or sympathy for the welfare of the sick. It always does a community great harm

to foster ignorance and to encourage error and deception, especially in a profession which deals with the life and health of human beings.

Childbearing has not had a new deal; we have paraded the horrors of pregnancy and childbirth, exaggerating them out of all reason in a campaign of propaganda to stimulate interest in birth control. Unethical professional writers, popular magazines, and yellow sheet publications have stimulated fear and uncertainty. An effort has been made to cause this process to be looked upon as an undesirable happening. We must combat this attitude and teach parents to look upon pregnancy and childbirth from a commonsense viewpoint. We must teach them that it is a safe and noble privilege to be indulged in at their wish. We can only accomplish our purpose of preventing maternal deaths by creating a community interest in the subject. Better maternal care at delivery will come only when the demand for it by the community becomes widespread. It is a problem not only for the medical profession or the state health department, but also for the parents, nurses and the general public. An aroused public opinion will do more toward making Florida and the United States safe for mothers and babies than any single movement.

As a beginning it would not be amiss for communities to take an inventory of their facilities for handling maternal cases, including hospitals, nurses and physicians. In every locality there are well trained, qualified men who are thoroughly capable of attending women in labor. There is no reason other than ignorance or stupidity for patronizing any individual who is not qualified to attend these patients. Nor is there any excuse for employing the services of any individual, who legally or illegally attends women in childbirth and who has repeatedly lost mothers or babies or both. If a community does not have adequate facilities for such cases the necessary steps to provide them should be taken.

AVAILABLE COURSES IN HOME HYGIENE AND CARE OF THE SICK

RUTH E. METTINGER, R.N., *Director*
Public Health Nursing

Individual health and public health cannot be dissociated. Hygienic homes mean hygienic communities, as health is dependent not only upon personal health but also upon healthful surroundings.

The aims and objectives of a course in Home Hygiene and Care of the Sick, as outlined by the American Red Cross and under whose supervision it is given, are definite and clear cut. They desire to develop in the student an appreciation of health; to build a basic understanding of the principles of prevention and control of disease; to teach efficient and helpful methods of meeting the normal problems of the home; to develop some practical knowledge in the care of the sick under home conditions and according to physicians' directions; and to help win the interest of mothers in keeping children home from school when sick and in having their children's defects corrected.

In order to apply what is given in the course to everyday life, the class room is arranged to represent a home and the students are required to practice each fundamental procedure after the nurse instructor has given the demonstration. For this reason, rooms in hospitals, hospital wards, or dispensaries are not practical as class rooms for this instruction. The work is planned to meet home conditions. The students not only learn by seeing and hearing, but by doing.

Among many of the less literate mothers these classes are a great boon. The nurse instructor can, by careful and tactful teaching, break down many old superstitions concerning health and disease, and instill in the student a basic knowledge of sound hygienic information. Likewise, a good foundation is laid for the future when these classes are conducted for high school girls. It gives them the opportunity to learn

the principles of health and reasons for established health habits. It also gives the student an appreciation of school and community health.

There are many opportunities in coordinating the Home Hygiene course with other subjects such as Home Economics, History, Art, and English or by including it in the curriculum as a separate subject. In several schools the manual training class has made the equipment for the class room such as home-made cabinets, bed tables, bed blocks and bed cradles. This course also may be related directly to the Junior Red Cross, as the activities of this program stress the fitness for service. For Boy Scouts the course can be taught as a means of developing a responsibility for the health of the family and county. It is also well adapted to the 4-H Clubs.

Great care must be taken that the students do not misinterpret the certificate which they receive upon satisfactory completion of the course. The reason for issuing certificates is in order to promote standards and they are credit cards comparable to what one might receive in school if passed certain requirements. It must be emphasized that this course does not make the student a "nurse," but enables the student to deal competently with situations arising within a home—the student's home.

It is to the nurse's advantage to apply to her local Red Cross Chapter for authorization as a Home Hygiene instructor. The nurse who is carrying on a generalized program under the auspices of the State Board of Health is enabled to contact more people and do more real health education in a much shorter time and in a more efficient manner. She is better prepared to meet the need and the obligation for developing community

responsibility for health, well being, recreational and civic progress. It is mutual dependence and mutual responsibility that holds groups together.

A course in Home Hygiene and Care of the Sick benefits the students who receive it, the nurse who instructs it, and the community in

which it is held. Since this course is sponsored by the American Red Cross, the local Red Cross Chapter will gladly assist in organizing classes through individuals or organized groups, such as clubs, church societies, commercial and industrial organizations, and educational institutions.

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M.D., *Director*

Deaths from Cancer (all forms), by Color, by Counties, Florida, 1936

Counties	Total	White	Colored	Counties	Total	White	Colored
STATE	1,458	1,217	241	Lafayette	3	3	0
Alachua	27	21	6	Lake	30	23	7
Baker	1	1	0	Lee	12	12	0
Bay	5	5	0	Leon	12	6	6
Bradford	3	2	1	Levy	7	5	2
Brevard	24	19	5	Liberty	1	1	0
Broward	16	16	0	Madison	14	9	5
Calhoun	3	2	1	Manatee	28	22	6
Charlotte	6	6	0	Marion	13	7	6
Citrus	2	1	1	Martin	1	1	0
Clay	15	11	4	Monroe	21	19	2
Collier	1	1	0	Nassau	6	4	2
Columbia	25	16	9	Okaloosa	3	3	0
Dade	188	170	18	Okeechobee	2	2	0
DeSoto	7	6	1	Orange	49	42	7
Dixie	1	1	0	Osceola	10	8	2
Duval	159	126	33	Palm Beach	42	30	12
Escambia	51	40	11	Pasco	8	7	1
Flagler	2	2	0	Pinellas	148	142	6
Franklin	4	1	3	Polk	75	70	5
Gadsden (Ex).	13	7	6	Putnam	16	10	6
State Hospital	4	4	0	St. Johns	21	13	8
Gilchrist	0	0	0	St. Lucie	6	5	1
Glades	3	3	0	Santa Rosa	13	11	2
Gulf	2	1	1	Sarasota	19	17	2
Hamilton	4	3	1	Seminole	23	13	10
Hardee	8	6	2	Sumter	3	3	0
Hendry	0	0	0	Suwannee	8	1	7
Hernando	4	4	0	Taylor	5	5	0
Highlands	8	7	1	Union	0	0	0
Hillsboro	184	165	19	Volusia	51	47	4
Holmes	3	2	1	Wakulla	4	2	2
Indian River	7	7	0	Walton	6	5	1
Jackson	8	8	0	Washington	6	4	2
Jefferson	4	1	3				

HOME PROPHYLAXIS IN TUBERCULOSIS

A. J. LOGIE, M. D., *Director*
Division of Tuberculosis

For the great majority of cases, home treatment is a poor substitute for treatment in a sanatorium. It is impossible to admit every case of tuberculosis in Florida to the sanatorium at Orlando. Even with a half dozen other sanatoria of equal size, there would still be a shortage of bed capacity. Obviously, many individuals will continue treatment at home.

At home many patients may be happier and more contented. Unfortunately, there are no strict rules and regulations in the home. Home treatment can accomplish excellent results if the individual will adhere to a strict regime and secure constant medical and nursing services.

The patient must be isolated from other members of the family, especially the children. If possible, young children should live elsewhere. Careful avoidance of contact infection must be practiced by the members of the household. This is best done by avoiding intimate and prolonged exposure and by maintaining the general resistance at a high level. Isolation at home is more satisfactory if use is made of the Burr Cottage, which is an inexpensive room-size abode, attached to the house, wherein the patient may be confined. If a room in the house is to be used, one should be selected which is removed as far as possible from the field of household activity. The airiest, sunniest and pleasantest room in the house should be selected. If possible, it should be a corner room with more than one window.

The patient's clothes, personal and bed linen should be boiled and laundered separately and set aside for his use only. Eating utensils must be boiled and kept separately. These should be limited to the patient's personal use.

The room in which the patient is confined should contain only such

articles of furniture which are absolutely necessary to comfort. There should be a minimum of rugs, draperies and wall decorations. These would only afford a harborage for the germs and uselessly encumber a room which requires the ingress of an ample supply of sunshine, fresh air and suitable ventilation. The flooring of the room should have a varnished surface and boards closely joined so that dust and germs cannot gather in the interspaces. The walls and floors should be mopped daily with a weak antiseptic solution. Any books, magazines or newspapers handled by the patient should not be used by the other members in the family.

The patient must be made as comfortable as possible at all times. The bed should be well raised above the floor to avoid drafts and facilitate nursing attention. A good bed mattress is essential. There should be some arrangement so that the patient can be propped up occasionally.

He should spit into a cup used only for that purpose. The cup should be boiled daily and the sputum destroyed by strong chemicals or by burning. If the patient uses cloth or paper bags for his sputum, these should be burned. He should be cautious about covering his mouth and nose when coughing or sneezing—not with his bare hand.

As regards the treatment of the patient, advice from the physician must be rigidly followed. Rest is absolutely essential. The diet should be varied. Nourishing food with a high vitamin and sufficient caloric content should be given, but the digestive system should not be overtaxed. Bed linen should be changed often. In cold weather the patient should have warm covers. Some heating device should be available. Those administering to the needs of the patient

should wear an apron over their clothes. These should be changed frequently and boiled and laundered separately. They should wash their hands frequently after attending the patient. Absolute cleanliness must be practiced at all times by the patient and those in his immediate environs.

Before a room used by a tuberculous case is made habitable for another occupant, the following measures should be taken. The walls and floors should be washed and scrubbed with soap and water. The windows should be kept wide open for

several hours to allow a maximum of sunshine and fresh air to enter. The bedding, particularly the mattress and pillows, will require fumigation in a gas chamber or exposure in a sterilizer to high pressure steam. All the room furnishings should be placed in direct sunshine for several hours. Any articles which cannot be disinfected should be destroyed.

Prophylaxis also includes the tuberculin testing of all other members of the household, especially the children, and x-rays of the chest if the test is positive.

LABORATORY NOTES

PEARL GRIFFITH
Bacteriologist in Charge

SUMMARY OF WORK DONE IN THE LABORATORIES OF THE STATE BOARD OF HEALTH DURING THE MONTH OF OCTOBER, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites.....	3480	553	277	136	152	4598
Diphtheria.....	1514	313	174	773	103	2877
Typhoid.....	965	235	99	111	25	1435
Malaria.....	1152	426	108	40	206	1932
Rabies.....	49	41	1	3		94
Tuberculosis.....	312	216	18	63	30	639
Gonorrhea.....	1215	436	205	353	97	2306
Kahn.....	10446	4236	784	3833	903	20202
Water.....		56	5	276		337
Milk.....	169	331	54	454	95	1103
Miscellaneous.....	920	63	229	358	41	1611
	20222	6906	1954	6400	1652	37134
Specimen containers distributed.....						17558

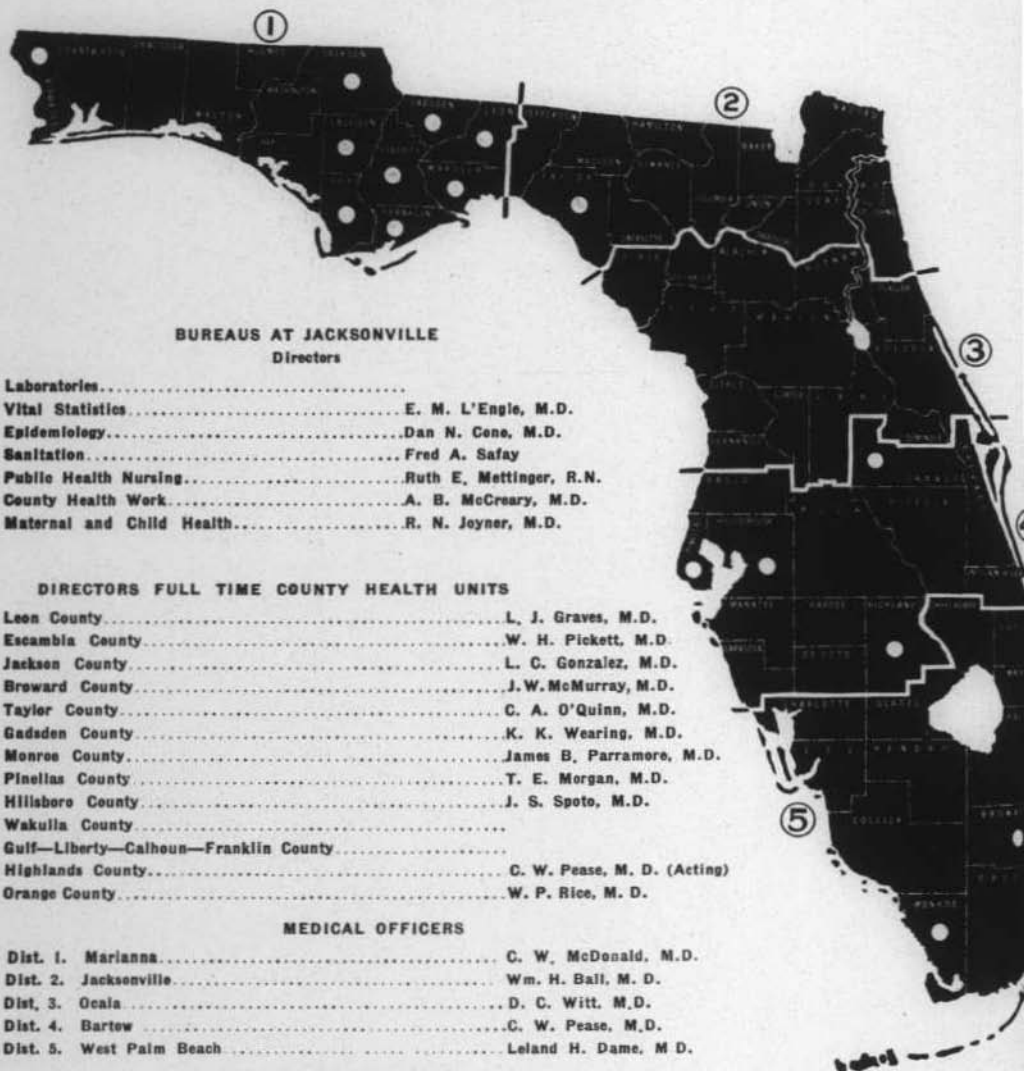
BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin.....	10,000 units	76 Packages
	5,000 units	42 Packages
Schick.....		9520 Tests
Toxoid.....		3380 C. C.
Typhoid Bacterin.....		3472 Treatments
Vaccine Virus.....		2679 Capillaries
Antirabic Virus.....		133 Treatments
P. P. D. Tuberculin.....	100 test pkgs.	10 Pkgs. 1st strength
		16 Pkgs. 2nd strength
P. P. D. Tuberculin.....	10 test pkgs.	28 Pkgs. 1st strength
		24 Pkgs. 2nd strength

PLEASE BE SPECIFIC WHEN SENDING REQUESTS FOR SPECIMEN CONTAINERS OR BIOLOGICALS. WE FREQUENTLY RECEIVE LETTERS THAT READ: "PLEASE SEND CONTAINERS," OR "PLEASE SEND TYPHOID VACCINE." THE DOCTOR KNOWS WHAT HE WANTS BUT WE DO NOT.

WATCH THIS MAP

It denotes the progress of County Health work in Florida.
Each white dot stands for a full-time county unit.



BUREAUS AT JACKSONVILLE Directors

Laboratories.....	
Vital Statistics.....	E. M. L'Engle, M.D.
Epidemiology.....	Dan N. Cene, M.D.
Sanitation.....	Fred A. Safay
Public Health Nursing.....	Ruth E. Mettinger, R.N.
County Health Work.....	A. B. McCreary, M.D.
Maternal and Child Health.....	R. N. Joyner, M.D.

DIRECTORS FULL TIME COUNTY HEALTH UNITS

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Pinellas County.....	T. E. Morgan, M.D.
Hillsboro County.....	J. S. Spoto, M.D.
Wakulla County.....	
Gulf—Liberty—Calhoun—Franklin County.....	
Highlands County.....	C. W. Pease, M. D. (Acting)
Orange County.....	W. P. Rice, M. D.

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Dist. 4. Bartow.....	C. W. Pease, M.D.
Dist. 5. West Palm Beach.....	Leland H. Dame, M.D.

MALARIA RESEARCH

Mark F. Boyd, M. D., Tallahassee.....	Rockefeller Foundation
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ENTOMOLOGY

W. V. King, Ph. D., Orlando.....	U. S. Bureau Entomology
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**BETTER HEALTH FOR OUR BOYS
AND GIRLS...** PROTECT THEM AGAINST
TUBERCULOSIS, THE DISEASE THAT STILL LEADS
AS A CAUSE OF DEATH BETWEEN 15 AND 25

**BUY and USE
CHRISTMAS SEALS**

The National, State, and Local Tuberculosis Associations in the United States

FLORIDA HEALTH NOTES

Official Monthly Publication of the

STATE BOARD OF HEALTH

JACKSONVILLE, FLORIDA

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THE CONFLICT AGAINST TUBERCULOSIS

A. J. LOGIE, M. D.

Director, Division of Tuberculosis

"The forces organized against tuberculosis today are pressing forward in three columns. The physicians are making the frontal attack, while the public health officials and surgeons are holding the right and left wings, where all forces, united, hope to cause a complete rout of the enemy."

Not only does tuberculosis take its victims largely in the prime of life but it can assume an epidemic form when conditions of life deteriorate, as is shown by war experiences and economic depressions. This makes it a more serious evil than even cancer. Medical science now speaks not merely of the prevention of the disease but of its eradication and of raising normal human health and normal human activity to an altogether higher power.

There are several factors which must be considered in the control of tuberculosis. The most outstanding are the discovery of the germ (tubercle bacillus) carrier and the prevention of the spread of the disease to contacts. The individual who is emitting the bacillus is known as the "open case". In tuberculosis of the lungs, which is the predominating type of the disease, the bacilli (germs) are situated in the infected

lung tissue. They are also embedded in the sputum which the tuberculous case expectorates and enveloped in the droplets which are emitted when he coughs. This being so, it is easily understandable that the early discovery and rapid isolation of such case will protect the health of those who may come into contact with him, directly or indirectly, unless they have already been exposed to and infected by massive dosage of the bacilli.

How much better it would be to find these cases in the early stage of tuberculosis. It would mean fewer contact cases and a much greater chance of cure for the infected individual. The early cases, unfortunately, are infrequently discovered due to the peculiar nature of the disease. They usually have vague symptoms, if any at all, which may be simulated by a multitude of minor ailments. The only means of weeding them out is by the tuberculin test, followed by the X-ray. As it is impossible to examine the entire population in this manner, the only alternative is to investigate certain groups. The group program which the Division of Tuberculosis is carrying out is confined to the senior high schools as the incidence of tuberculous infection in childhood is greatest between the

ages of fifteen and twenty years. In this manner the physician will not only find the early case but will also be able to trace the unknown open case which has been the source of the infection.

Concerning the very tiny but formidable enemy, the tubercle bacillus (germ of tuberculosis), just what is known of its habits? It must have air, moisture, darkness and an optimum temperature to survive and reproduce abundantly. We know that such conditions, which are admirable to the bacillus, abound outside the body and enable the organism to survive for many months. It is important to know the fact that once the bacillus enters the lung, it finds all these conveniences there. The lung is the breathing organ of the body and contains a plentiful supply of air; its natural secretions furnish the necessary moisture; and the concealed compartments, formed by the anatomical structure of the lung, supply dark recesses; while the natural body heat offers the ideal temperature. If the resistance of the body is low, the bacillus will thrive and become very fertile in such cozy surroundings at the expense of the lung tissue and the body eventually.

Once the bacillus or a number of bacilli find lodgement in the lung and the natural resistance of the body is unable to cope satisfactorily with the infection, the tissue invaded is destroyed. In other words, locally, the tissue dies and is converted to a semi-liquid, cheesy-like material. The area involved becomes more extensive until finally a bronchial channel is included. The material which usually contains some of the bacilli is coughed up through the bronchial passages and is expectorated in the sputum, leaving an excavation at the original site of infection in the lung, which we call a cavity. The cavity may be large or small, single or multiple. This is the stage at which the victim realizes that he is not well, as the varying symptoms of tuberculosis make their appearance. This stimulates the individual to visit his doctor who diagnoses tuberculosis already in a moderately to far advanced

stage. Unless there is destruction of lung tissue with cavity formation the individual will rarely cough up infective sputum. Coincidentally with the onset of lung destruction, the individual becomes a menace to his family and to society at large.

At this time, his isolation is imperative. Due to the fact that there are approximately 10,000 cases of tuberculosis in this State, not all of which are open cases, proper isolation of all of them in a sanatorium is not feasible at the present time. Few of these patients can be expected to carry out vigorous precautionary measures at home. There is no doubt that sanatorium treatment is decidedly preferable to that of home treatment.

The major treatment of tuberculosis is rest. General rest will conserve the energy of the body which is already under great strain due to tissue destruction and constitutional toxemia. However, general rest for the body is not enough. Local rest for the diseased lung which is still functioning is necessary. Putting the patient at absolute bed rest will reduce the amount of muscular movement and diminish the activities of the various organs of the body. The work of the lungs will also be lessened to some degree. Nevertheless, absolute bed rest alone, will not produce a lasting improvement and the prognosis of the patient will remain a dubious one. In the *fortunate* case it will be many months before the patient's condition is considered to be quiescent. Meanwhile, the patient in a sanatorium is occupying a bed for a prolonged period for which hundreds of other similarly afflicted cases are clamoring and in the meantime, his dependents have become a charge upon the local community as he is unable to provide for them.

The solution to these problems lies in modern collapse therapy. Collapse therapy will decrease the number of individuals who require hospitalization and curtail the length of institutional confinement and in this way save months of invalidism and expense. The commonest method of collapse therapy is artificial pneu-

mothorax (the air treatment). Although pneumothorax is considered a surgical procedure by some, it lies within the province of the physician. Pneumothorax treatment may be continued outside the institution; for example, at a clinic or out-patient department. These are the ambulatory cases. After a short period of treatment, the patient may be able to resume to a varying degree the position of family provider and so lighten the burden placed upon the social welfare agencies.

Besides the social and economic advantages which can be brought about by pneumothorax treatment the direct effect upon the diseased lung of the individual should be considered. Pneumothorax, by compressing the lung will immobilize it to some extent and so produce local rest. Pneumothorax at first will force the accumulated secretions out of the lung; then it will close the bronchial channels and allow no air to enter the diseased tissue; finally it will collapse the small compartments and cavities in the lungs. In all, it will change what was formerly an ideal abode for the tubercle bacillus into a very uncomfortable dwelling place. The germ under such adverse conditions will deteriorate and wreak less havoc. This will enable the body resistance to deal more effectively with a weakened invader and stimulate the healing of the damaged tissue.

While artificial pneumothorax is the most worthy and most notably employed collapse procedure, its use unfortunately is limited to less than half the cases *wherein* it is indicated.

Nearly everyone is no doubt aware of the fact that in artificial pneumothorax, the air is not introduced directly into the lungs but into the potential space between the outside of the lung and the chest wall. The pressure of the introduced air pushes the lung, which is an elastic organ, away from the chest wall and compresses it.

As most of the cases of tuberculosis are found in an advanced stage, in many instances, certain complications have occurred which make pneumothorax unobtainable or un-

satisfactory. In about 40% of pneumothorax failures, the cause has been adhesions between the lung and the chest wall which prevented the lung from being successfully collapsed by holding out cavities or other diseased portions. Periodic examinations by the X-ray or fluoroscope are necessary to determine the amount of collapse and the success of the pneumothorax induction. Even though pneumothorax has been instituted, it has not accomplished its purpose if the sputum remains persistently positive for the tubercle bacillus. The pneumothorax case with a positive sputum is just as great a menace to society as he was before the pneumothorax was instituted. When the sputum positive individual becomes sputum negative and remains so, he is no longer a public health problem. If the sputum is still positive after three to six months of pneumothorax treatment, other measures by which effective collapse may be obtained must be considered.

The surgeon has a definite place in the treatment of pulmonary tuberculosis. There are various surgical procedures all of which are of great value as they will convert a great percentage of unsatisfactory pneumothorax cases or apparently hopeless cases into satisfactory ones. If the physicians were to become a little more surgically minded, they would use the advantages that surgery offers them much earlier than they do. Tuberculosis is really a medico-surgical condition. No institution for the treatment of tuberculosis is complete without a surgical service.

Finding the bacillus carrier and isolating him will safeguard society. Isolation is a very stringent measure, which is, nevertheless, compulsory under the circumstances. When more than isolation alone can be offered to the tuberculous individual, the hidden case who formerly objected to being restrained in any form and found the stigma of a diagnosis of tuberculosis too distasteful, will reveal himself, become less introspective and more amenable to treatment. The cure of a case of tuberculosis is the objective of the physician and

surgeon. Whichever route the physician and the surgeon may take to combat this public enemy, there can be no doubt that their individual objectives eventually merge into one mutual aim, which is the conversion of the tuberculous case, who is dan-

gerous to society, to a healthy, useful citizen. Those who are engaged in preventive medicine are primarily concerned with fortifying the community health so that it may become impervious to the attack of this social evil—tuberculosis.

THE PROBLEM OF RIDDING FLORIDA OF TUBERCULOSIS

By HARRIET GRIFFITH, St. Petersburg Senior High School

Winner of first prize in the State Tuberculosis essay contest sponsored by The Woman's Auxiliary to the Florida Medical Association

"Tuberculosis, seventh worst plague to mankind is chronic, communicable, infectious, preventable, and curable." It is steadily coming into control, thanks to the ceaseless efforts of the many men and women who have devoted much of their time, energy and money to the stamping out of this disease. The problem now facing the peoples of the world is to search out a method of tuberculosis prevention that will completely wipe out all tuberculosis germs. Tuberculosis is a disease which can be ended only when all the people in the world will agree to abide by rules made by learned doctors who know what they are talking about.

The diagnosis of tuberculosis is often done too late to do the patient much good so far as permanent cure is concerned. It is wise for persons who feel weak, become tired easily, have rapid heart action, fever in the afternoon, loss of weight, shortness of breath, or a cough, to place themselves under a good physician's care to be observed for a few weeks. These are early symptoms of the White Plague and are often mistaken for symptoms of a lesser disease. The later signs, spitting of blood, chills, a peculiar flush in the cheeks, a continual cough, and great weakness are more certain. Immediate steps should be taken toward diagnosis. The recording of body temperature four times a day is important in recognizing tuberculosis. Hemorrhages and intolerable fatigue are indica-

tions of advanced stages of the disease.

It has been made a practice of the medical profession to diagnose tuberculosis of the lungs in order to establish a permanent cure. When the tubercle bacillus invades the tissue of the lungs, bones and joints, the lymphatic glands, the kidneys, or the meninges at the base of the brain, the tissue produces a defense in the form of the "tubercle"—a large white cell visible to the naked eye—which engulfs and usually strangles the tubercle bacillus. Although nine out of ten human beings have at one time or another had tubercular infection and have killed off the invading germ, sometimes the bacillus wins out and the tissue begins to break down and liquify, a process called necrosis. Almost without exception when this stage has been reached in the lungs a secondary infection takes place. Other germs lighting on this soft spot cause more destruction. In but very few cases the bacilli find favorable conditions and multiply greatly. The diagnostician should examine the bared chest, take an X-ray of the chest, this being the most important part of the examination. He should also examine the sputum for germ count.

In the treatment of tuberculosis, the first thought of the patient and his family is a suitable climate. Their opinions are worth but little compared with those of a physician. In the order of their seeming import-

ance the ideas of the laymen are: climate, serum, horseback riding, a drug with gold in it, milk and cream. The physician's idea is rest, fresh air, extra food, surgery, mental encouragement, and climate. A dozen or so surgical operations have been applied to advanced cases. These are needed rarely. A vaccine, termed B.C.G., for protecting infants born of tubercular mothers is sometimes used.

It was in 1845 that George Bodington was disgraced and driven out of his practice because he set forth the idea of putting patients in the open air. A patient, ordered to ride in the open air every day, did so, though many people scoffed at the idea and often pitied her as she drove each day, winter and summer, rain, snow or shine. The result was that this woman was cured.

On March 24, 1882, Robert Koch, famous German medical investigator, announced the discovery of the tuberculosis germ. Before this time tuberculosis was known merely as a dread disease which claimed many poverty stricken people who were unable to supply themselves with the correct food, or others who simply took no care of themselves in respect to rest, proper nourishment, and exercise. Later Koch developed the tuberculin test which is used a great deal today. In 1884, Edward Livingston Trudeau found that he had tuberculosis due to caring for his brother. He theoretically recognized the fact that germs were carried by contact and so established the first sanatorium in the United States for the care of tuberculous patients. Since that time and with the aid of Edward Trudeau, it has been established definitely that the White Plague is carried by tubercle bacilli.

Tuberculosis is communicable and infectious and has been termed by Fisher and Fisk in their volume, *How to Live*, as a house disease. "The invention of houses has made it possible for men to live in all climates," according to Fisher and Fisk, "yet this indoor living is responsible for much disease. The houses give comfortable shelter and warmth and pro-

tect us from the elements and from wild animals, but the protection has been overdone. Man is biologically an outdoor animal. His attempt at indoor living has worked him woe but so gradually and subtly has it done this that only recently have we come to realize this fact. Tuberculosis, one of the worst scourges of mankind, is primarily a house disease."

One of the main carriers of the tuberculosis germ is sputum, and wherever you find people in any numbers, the germs are very numerous. A child's constitution is usually strong enough to prevent consumption, although slightly positive reactions are not uncommon among the younger people as are manifested in the high school tuberculosis tests. However it is a fact that about one-half a million children in the United States have tuberculosis and there are nearly a million other suspected cases. The death toll is at least one child out of every ten under the age of fifteen years.

In isolated districts there is not such great danger of spreading the germs, but in congested communities, particularly in slum districts, there is great peril of infection. It would be for the general welfare of the people if afflicted persons would destroy all containers of sputum, keep themselves scrupulously clean, and sterilize all objects with which they come into direct contact. In other words, "keep healthy by keeping clean." According to immigration authorities, nationality and not caste is the great factor in tuberculosis problems. People living in sparsely inhabited countries, as in some parts of Africa, have a great percentage less of the infection than those people living in thickly populated England.

Since tuberculosis is also a disease of poverty and ignorance, it thrives well in such places as Puerto Rico, where it was the first cause of death in 1934. Puerto Rico is vastly overpopulated, and due to lack of employment, the low economic status of the people, the meager dissemination of knowledge, and the lack of hospitals and sanatoriums for the care

of those with the disease, the spread is rapid. The protection of such groups of human beings against tuberculosis is based on: first, the removal of those persons having tuberculosis from contact with persons not having the disease; second, the proper care of those who have tuberculosis; and third, the education of the sick and the well in the prevention of the disease.

Tuberculosis ranks as one of the greatest plagues known to mankind. It is true that the bubonic plague in early centuries in Africa and Europe took a great toll of lives. During the fourteenth century the Black Death mortality rate was enormous, being as high as three-fourths of the population in some European communities. Cholera likewise has taken quick and wholesale toll among the peoples where communication and contact has been prevalent. Diphtheria, typhoid fever, infantile paralysis, smallpox, and other plagues have cost civilization many, many lives. But recognition, isolation, education, immunization have decreased the death-rate of these scourges. The fact that announcing a case of any of these diseases exists in a neighborhood is sufficient to send the public detouring far out of its beaten path, is proof of the good results of educational campaigns.

Unlike these plagues, the White Plague is not easily recognized as such, yet it is present in nine out of ten persons at sometime during their lives; it causes 100,000 deaths annually in the United States; it often works unrecognized for a long period of time, even until advanced stages of the disease when cure is impossible. In this state there are 1100 deaths per year for every 11,000 cases of tuberculosis. Communities have not recognized the importance of isolation, and health authorities have not had the necessary organization, political influence, and financial backing to enforce isolation of known cases.

Of the failure to consider seriously and quickly the victims of this disease I state an example: within my experience in this county I have

known one case where a tuberculosis sufferer had to go to three doctors before she finally obtained the statement necessary to give her treatment in the tuberculosis unit of the County Home. Her sister had died the year before of the same disease. Treatment should be made readily available to all known tuberculosis patients.

It is vitally necessary to isolate tuberculosis cases. Today there are in the United States 1204 sanatoriums, departments, and preventoriums for the tuberculous. They supply about 100,000 beds for treatment and about 7000 more are in prospect. Florida is one of those progressing states which, in its fight against tuberculosis, has erected a state sanatorium. It is in Orlando and will be opened some time this spring. The most advanced treatment will be available there where 350 patients may be lodged. Since 1917 the annual death-rate in Florida has been reduced from 119 deaths for every 100,000 population to 55.9 in 1935 on account of the care taken by authorities to help prevent this disease.

A state program of education such as is sponsored by the State Board of Health in cooperation with the schools should awaken communities to the importance of recognition and treatment of tuberculosis. Gratifying results should soon follow in the steps of health education, tuberculosis tests, health clinics, and demonstration health programs sponsored by the State Tuberculosis Field Unit. As typhoid fever in Escambia County, Florida, decreased from eleven deaths annually to but three deaths since 1932, after a local Health Unit was set up, so will tuberculosis in this state decrease when adequate health units are organized and this program of education is carried out.

In 1880 tuberculosis caused 360 deaths for every 100,000 people in the United States. This number has been decreased to only 60 deaths for every 100,000 persons, due to scientific knowledge gained and applied for the prevention and treatment of this disease.

If we are to be rid of tuberculosis

in Florida, quite drastic measures will have to be taken. Whatever the cost might be for ridding Florida of this disease, it would not be so great as the cost of neglecting it and allowing it to spread.

The war against tuberculosis in Florida, as elsewhere, should be fought on three fronts: first, proper treatment for those who have con-

tracted the disease; second, prevention for those who are subject to it; and third, education for everyone as to the causes, symptoms, and treatment of tuberculosis. By united, continuous and intelligent effort, Florida, a state so thoroughly blessed with all the desired conditions of good living, can defeat and banish the dread enemy, the White Plague.

ALL-AMERICA ENEMIES

E. C. GEIGER, D.D.S.

Director, Bureau of Dental Health

Dan Dental Disease holds the dubious honor of being the most universal malady of all Public Health. He has been a star player on the Morbidity College eleven for many decades. They play a tremendous schedule. A game is played every day in the year. Their prospective student body is composed of every age group from young children to tottering old folks. Dan has always been a heady quarterback, who successfully directs many plays for his more powerful team-mates. They value his excellent interference in weakening the opposing line of resistance. Dan is seldom spectacular because he rarely carries the ball. He, too, is a good defensive back, smearing lots of Public Health University power plays at the line of scrimmage—a valuable field general, and a thorn in the flesh of opposition. Practically every member of American civilization is personally acquainted with him, but he has never been listed as a member of the "All America Enemy" team.

This team is placed in order each year by that high Commissioner of Public Health ball, Judge Vital Statistics, who collects much information of such players each month from U. S. Epidemiology. Judge Statistics has found it necessary to award a prominent place on the unmythical All-America Enemy eleven each year to Tuberculosis. Just last year, facts and figures revealed, "T. B." as a rampant halfback of Mortality University, to be in seventh place as a

leading scorer for the nation. Truly, a "galloping ghost" on Public Health gridirons. He also was an excellent blocker. His "body blocks" kept the opposition on their backs, while his prodigious kicks found the ball out of bounds in "Coffin Corner".

The two teams, All-America Enemy and Public Health University wage a constant daily battle throughout each year, but public interest is sharpened during the Christmas season, when the annual "Health Bowl" game is played. The Alumni of Public Health University and great numbers of the American public support this magnanimous battle each Christmas. They wave as their banner the Lorraine Cross. Public Health University has developed a counter triple-threat back, Lorry Cross, who is making "T. B." really look sick. This fellow, fifty years old, is a real power. He wears a red double bar cross on his helmet, and he has kicked his team out of danger many times. Lorry Cross keeps "T. B." talking to himself in lots of games. The Public Health team is becoming stronger each year and is now captained by a crashing, powerful, irresistible fullback, Mordecai Education. The selection of "T. B." as All-America Enemy halfback has been assured from year to year, but his power is on the decline.

The public views the snake-hipped elusiveness of "T. B." with alarm, without realizing the important part they must play to stop the devastating

power of this featured player. Mor-decai and Lorry try to tell them, and interest is more apparent now, but, if the long runs of "T. B." are to be stopped more often the support of onlookers must improve.

During the past 100 years "T. B." has changed his name three times, but he hasn't changed his purpose. Perhaps his idea was that his hosts would be fooled, so he started out as Phthisis, then Consumption, but his real name has been exposed for a good many years—Tuberculosis.

"T. B." has recently been appointed Coach at his beloved Morbidity College, with part-time duties in Mortality University. Morbidity students usually "pass out" to Mortality University for graduate work. "T. B." desires to become a member of the faculty at Mortality U, and sincerely believes he will realize his aspiration, through poor respiration. However, President Heart Disease, Vice President Nephritis, and Dean Cancer fear his influence on the stability of their positions.

Recently, Coach "T. B." delegated Hack Pneumonia, his best "scout" to subsidize any and all prospective players for Morbidity College and Mortality University. Hack in turn sent his Chief Assistants, Common Cold, Joshua Influenza, Fast Living, and Low Resistance, on a tour of the country to popularize Morbidity and Mortality. They are meeting with much success and prospective students are prolific.

A faculty advisor has recently been elected at Morbidity College. None other than that popular All-America Enemy quarterback, Dan Dental Disease. The professor is doing yeoman work in assisting Professors Heart Murmur, Arthritis, Neuritis, and Rheumatism, to prepare their students for serious graduate work at Mortality U. Incidentally, the diploma from this graduate school is a Death Certificate, and earnestly sought by so many pseudo-precocious young people of today when tutored by the aforementioned coach and faculties.

It is hoped that Dr. Health Education will be appointed registrar at

Morbidity College in order to refuse matriculation to many students.

Public Health University has recently enrolled two comparatively young men who have been showing up well in the practice field. These boys play end positions on the Public Health team. Few plays are run around them. They have an uncanny ability to diagnose the plays which Coach "T. B." concocts for Morbidity. Their names are Tuberculin Test and Konrad X-Ray.

The American public is becoming more interested and concerned in this constant warfare between these rivals; a movement is under foot to elect that grand old man, Dr. Natural Senility to the Presidency of Mortality University. His first official acts would be to fire the entire faculty of Mortality U and demote Morbidity College to a Kindergarten with Principal Mild Stomachache in complete charge.

The curriculum of the Public Health University is designed for the prevention of disease which is classified as (1) Communicable, (2) Degenerative.

Tuberculosis is prominently associated with both types. Dental disease is not communicable, but slowly and surely induces degenerative diseases of the heart, lungs, kidneys, eyes and joints. Dental infection lowers the resistance of the body to any communicable disease.

The theme song of corrective treatment in medicine and dentistry is "remove the cause, and care for the result" until health is re-established. The text of Public Health is "prevent formation of the cause of ill health." Dental infection is a potent indirect cause of much ill health.

Tuberculosis is usually thought of as only an air passage disease, i. e. pulmonary tuberculosis. Dental disease is considered as a toothache or such discomfort. It is not the good fortune of preventive medicine to have either disease so limit itself in effect.

Oral Tuberculosis is rare, but found occasionally as lesions of the bony and membranous structure of the oral cavity. Tuberculous bone

lesions may result from a primary or secondary infection. The condition may be brought about, especially in the lower jaw, by the entrance of the tubercle bacillus through a "dead" tooth. Tuberculosis of the lower jaw has been known to progress to the point of fracture. Tuberculous cavities have been demonstrated within the tooth structure. The development of an ulcer in or about the mouth of a person known to have active pulmonary tuberculosis is highly suspicious as a tuberculous lesion of the mouth. The presence of any ulcer of this type may give rise to a suspected pulmonary tuberculosis. A definite diagnosis of positive or negative tuberculosis should be made at once by a physician.

Ulcers of the mouth are caused many times by jagged, broken-down teeth, which heal upon satisfactory correction of the cause. However, it is difficult to distinguish from appearance the tuberculous lesion of the mouth in the early stages, with other lesions of the same type.

The glands of the neck, located below either ear, act as a sensitive barometer of all infectious conditions in this vicinity. A distinct enlargement of these glands, on the side of the head affected, is produced often in children by dental infection. However, tuberculosis of these lymph glands is one of the commonest forms

of lymphatic inflammation in children. Infected teeth, as a source of infection, may be associated with glandular tuberculosis as transmitted through the lymphatic system.

The mouth with broken-down, decayed and infected teeth, represents an ideal culture media for the tubercle bacilli. This organism may be present in the mouth and the suitable environment of dental infection, filth, moisture, heat and darkness, is most inviting for their rapid growth. The childhood types of tuberculosis may be contracted as an indirect result of decayed teeth by inhalation, ingestion or other modes of transmission of the tubercle bacillus. A prominent pediatrician said that many cases of adolescent tuberculosis are the result of this breeding place for the organism of tuberculosis.

It is true that many people suffering from some type of tuberculosis have good dental health, and many people suffering from dental disease do not have tuberculosis, but a strong physical resistance must be classified as one of the most powerful factors in preventive medicine. A normal dental apparatus will assist in building resistance to many diseases by thorough preparation of the diet for digestion and nutrition; good dental health will prevent a source of infection to the body.

HOUSING AND ENVIRONMENTAL SANITATION IN THE CONTROL OF TUBERCULOSIS

By G. F. CATLETT, Chief Engineer

The organism causing tuberculosis is one of the most resistant of all the disease causing types. It persists when scattered in tuberculous secretions and can easily be picked up by contact with infected materials and articles coming in contact with infected persons.

Tuberculosis is one of those communicable diseases where robust, healthy, well-nourished persons with normal disease resisting functions stand a minimum chance of serious infection; while the poorly nour-

ished, weak, and unhealthy type with low resisting powers are its chief victims.

In its control it is necessary that the diseased person be held to a schedule of personal hygiene and be surrounded by the best of sanitary environment so that the disease organism cannot be distributed. It is equally important that living conditions be such that the body will be kept in a well nourished healthy condition.

In one ward of New York City, in

1894, it was found that where single houses were built per lot the general death rate was 29.3, and 109.6 for children under 5 years of age. Among those living where two houses were built on a lot—one in front and one in rear—the general death rate was 62.0, with 204.6 for children under 5 years of age. Statistics for another large city showed a death rate where families were living in one-room apartments, 21.4; in two-room apartments, 18.8; in three-room apartments, 17.2; and in four-room apartments, 12.3.

In a slum clearance project in Liverpool, England, it was found that before reconstruction the death rate for all causes was 37.0 per 1000, and after reconstruction 26.6; while the tuberculosis death rate was 4.0 before and 1.9 after.

A big factor in this increased death rate is the close contact in crowded living quarters, the lack of pure air and sunshine. The fact must be recognized, however, that people occupying such quarters are also not able to purchase sufficient quality and quantity of food to give proper nourishment. The occupants are also subjected to overwork and worry. Also such housing is not equipped with proper sanitary conveniences for proper bodily care and safe disposal of body wastes, and such places are never adequately screened against disease bearing insects.

In a recent paper the City Health Officer of Savannah, Georgia, gave curves showing the tuberculosis death rate, white and colored, since 1852. A striking fact was shown in connection with the environmental difference of the colored rate. When the negro slaves who had been living on the farms, flocked to the City after their liberation, the tuberculosis death rate curve took an abrupt sharp upward direction, while the white rate showed no such change. These negroes, more susceptible to disease than the whites, left the farm where fresh air, sunshine and nourishing food were abundant and entered into the crowded conditions in the city

where no provision had been made for their housing and where they had to scratch for food.

Under the conditions prevailing in this insanitary housing, the occupants are in such under-nourished and unhealthy condition that they fall easy prey to tuberculosis infection. Once diseased, the patient cannot possibly be surrounded with the conditions that would permit his cure, nor the precautions that would prevent the spread of the disease.

Although these facts are well known to public health officials, it has not been possible to develop any systematic health program for the elimination of such housing conditions. The result of the pollution of a public water supply, and the need for a sewerage system touches directly the family of the influential and well-to-do. These public utilities have very generally been provided of the highest type. The slum building owner may be made to provide a minimum protection to the general public in the form of a pit privy. Pure water is available at the property line, but it is either utilized with inadequate, insanitary fixtures, or an outside well is provided instead. The attitude taken is that the home one selects or is compelled for economic reasons to occupy is his personal concern and not a public affair. With such disease foci as do, or may develop in these sections of insanitary housing, the public must be concerned.

Most cities have building laws—some state-wide. Most of these codes, however, are concerned with structural features such as thickness of walls, materials used and fire protection. They do not cover sanitary features and cannot be considered as public health housing laws.

Even though we might pass laws that would condemn the use of such houses, unless proper places could be substituted for them, the occupants evicted must necessarily overcrowd other places. With some difficulty we might force the abandonment of insanitary buildings, but by no means could we force investments in new

buildings, where economic conditions would not permit rentors to justify the investment.

Recently the Federal and some State Governments have attempted projects for housing betterment. These, though they make relatively large expenditures hardly serve more than a model. Such efforts have for the most part been promoted by the

sociologists and criminologists, rather than by public health organizations for reasons of public health.

However, there is a necessity for housing betterment which should be included in the active health programs. Methods should be taken to educate the public in this public health aspect and to keep this need conspicuously before them.

HOW SANITATION IS A PART OF TUBERCULOSIS CONTROL

FRED A. SAFAY, *Director*
Bureau of Sanitation

Just what is the part of the Bureau of Sanitation in the tuberculosis control program of the State Board of Health? It has been said of the Bureau that its program is to assist cities, towns, and individuals in matters pertaining to health and sanitation that are non-medical in character.

On reviewing regulations covering the problems over which the Bureau of Sanitation has supervision, the following rules are found to have direct bearing on the fight against tuberculosis in preventing its spread:

Rule No. 99. Sanitation of Canneries: "... packers shall not knowingly employ in or about the cannery any person afflicted with infections or contagious disease."

Rule No. 102-B. Shellfish Sanitation: Section 4. "No person who has a contagious or infectious disease or who is a carrier of a contagious disease or who has been in contact with a contagious or infectious disease shall be permitted to engage in the handling of shellfish or shall be permitted to enter a shucking or packing plant."

Rule No. 105-A. Crab Meat Sanitation: Section 3. "No person afflicted with communicable disease shall be employed in the crab meat plant or allowed to enter the work room."

Rule No. 80. Dairy Sanitation: Section 7. Requires that all cows in dairies where milk or cream is handled, offered for sale or given away, shall be tuberculin tested.

Rule No. 33 Prohibits use of the common drinking cup.

Rule No. 34 Prohibits use of the common towel.

No. 514 Laws of Florida, Chapter 12419 on Tourist Camps: Section 9. "every occupant or tenant of a tent, tent house or cottage in any tourist camp must immediately report to the person in charge any case of sickness or disease in his or her tent, tent house or cottage."

From the above rules which form only a part of those regulations governing sanitation operations, it will be noted that through regular sanitary control, the Bureau of Sanitation is directly as well as indirectly concerned with the fight against tuberculosis. By controlling the employment of persons suffering from disease in food handling plants and by regulating the use of common equipment by those persons, the Bureau of Sanitation thus endeavors to protect the public health.

In addition to these rules, the enforcement of which is also the responsibility of the Bureau of Sanitation, there are other equally important ways in which sanitation has a bearing on tuberculosis control: the State Screening Law, the Model Screening Ordinance, Fly Control literature, and also proper garbage and waste disposal provisions. Through these mediums the menace of disease transmission by flies is eliminated.

The people of Florida, realizing

the position of the Bureau of Sanitation in regard to the sanitation of food handling plants, regularly request the investigation of places where persons suspected of having tuberculosis are employed. Constant vigilance on the part of the sanitary officer to detect such cases results in obtaining proper care for the tuberculin infected individual and in protection for others. "No Spitting" signs for side walk posting and many others are weapons used by the ever alert sanitary officer.

Through the annual inspection of child caring and boarding homes, a function of the Bureau of Sanitation carried on in cooperation with the State Welfare Board, another important battle in the fight against tuberculosis is conducted. District sanitary officers closely check

all conditions relating to sanitation in the homes. These inspections in many instances reveal deplorable conditions under which the children live—dark corridors, poorly ventilated and overcrowded sleeping rooms, badly equipped infirmaries having no heating facilities, carelessly protected food supplies, improperly handled milk supplies, and poor sewage and garbage disposal.

All over the state of Florida the sanitary officer throws a light on the subject of proper sanitation—a light that will assist in the control of tuberculosis, if in this enlightening age, the dark, dingy rooms in the child caring institutions, as well as in others, are banished.

Only through the proper enforcement of sanitary measures can tuberculosis be completely controlled.

NURSING FIELD WORK IN TUBERCULOSIS

RUTH E. METTINGER, R. N.

Director, Bureau of Public Health Nursing

Since tuberculosis is considered one of the major problems of public welfare and since the establishment of a tuberculosis clinic is essential in solving the problem or its cure and prevention, it is most important to have the public properly informed on the subject of tuberculosis and the requisite value of a tubercular clinic. This can be done very effectively through the field work of the public health nurse.

To inform the public does not mean merely the distribution of literature; it means careful teaching by someone who is perfectly familiar with the disease. And to allow just anyone to talk on tuberculosis would defeat the purpose. Even physicians who do not make a special study of tuberculosis, frequently refuse to talk on the subject; they refer it to someone who specializes in the work.

The Division of Tuberculosis of the Florida State Board of Health is in charge of the establishment of tuberculosis clinics in the counties of Florida. When they plan a tuberculosis clinic for a county, the nurse connected with this division precedes

the clinician by three weeks. In those three weeks she contacts the district nurses and the local doctors in order to explain the procedure of the clinic and to obtain their approval; then she holds a conference with members of the board of education, stresses the importance of the tuberculin test and x-ray, and puts the program for the schools before them.

When the approval of the doctors and the board is obtained, the nurse meets with the teaching personnel and discusses methods of correlating the study of tuberculosis in the English and Science classes of the upper grades and how to include it in the health lessons of the lower grades. She talks to the students giving them a clear and concise understanding of the fundamentals of the disease and shows them the advantages of the tuberculin test and x-ray. Their parents are also asked to be present, and arrangements are made to meet with the Parent-Teacher Association groups.

Following this educational program the forms requesting the tuber-

culin test are distributed among the students—these are signed by the parents and returned to their teachers. When the above procedure is carried out—but not until then—the community will be prepared for the establishment of a tuberculosis clinic. At a designated time, the clinician visits the county and begins tuberculin testing. In the event the local doctor is willing to give the tests, the clinician comes in later to take the x-rays.

Where there is a county health unit, it is possible that the tuberculosis program has already been inaugurated in the schools. Where no health unit exists and the district

nurses are carrying out a generalized program and unable to give the time necessary for the preparation of the clinics, the field work of a nurse from the Division of Tuberculosis is essential. However, the district nurses are of valuable assistance to her in discovering tuberculosis cases in the communities.

The success of a tuberculosis clinic is dependent upon the field work of the nurse, without which the public could not realize the importance of establishing a tuberculosis clinic that would not only discover the early symptoms of tuberculosis, but would eliminate its spread.

LABORATORY NOTES

PEARL GRIFFITH
Bacteriologist in Charge

WORK DONE IN LABORATORIES OF STATE BOARD OF HEALTH, NOVEMBER, 1937

	Jacksonville	Tampa	Pensacola	Miami	Tallahassee	Total
Animal Parasites	3335	449	385	144	173	4486
Diphtheria	1034	553	113	643	30	2373
Typhoid	875	149	61	56	4	1145
Malaria	993	182	73	24	53	1325
Rabies	45	39		1		85
Tuberculosis	344	184	45	88	21	682
Gonorrhea	1076	381	176	401	32	2066
Kahn	9397	4084	502	4309	166	18458
Water		55	12	292		359
Milk	221	259	10	295	138	923
Miscellaneous	794	50	145	324	5	1318
	18114	6385	1522	6577	622	33220
Specimen containers distributed						19192

BIOLOGICAL PRODUCTS DISTRIBUTED

Diphtheria Antitoxin	10,000 units	95 Packages
	5,000 units	26 Packages
Schick		6120 Tests
Toxoid		3255 C. C.
Typhoid Bacterin		3008 Treatments
Vaccine Virus		2620 Capillaries
Antirabic Virus		170 Treatments
P. P. D. Tuberculin	100 test pkgs.	10 Pkgs. 1st strength
		13 Pkgs. 2nd strength
P. P. D. Tuberculin	10 test pkgs.	14 Pkgs. 1st strength
		13 Pkgs. 2nd strength

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M. D., *Director*Deaths from Tuberculosis (All Forms) and Rates per 100,000
Population, by Color and by Counties, Florida, 1936

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rates	Deaths	Rates	Deaths	Rates
State	905	55.1	387	33.2	518	108.8
Alachua	12	32.7	6	29.7	6	36.4
Baker	1	13.7	1	18.2	0	..
Bay	3	16.8	1	6.8	2	60.6
Bradford	4	45.5	0	..	4	167.9
Brevard	4	27.2	2	20.0	2	42.6
Broward	15	63.3	4	25.5	11	137.5
Calhoun	3	34.9	0	..	3	187.5
Charlotte	2	53.0	1	32.9	1	135.3
Citrus	0	..	0	..	0	..
Clay	5	70.4	1	19.2	4	210.5
Collier	1	19.2	0	..	1	43.5
Columbia	15	96.8	7	74.5	8	131.1
Dade	114	60.1	60	39.4	54	144.4
DeSoto	3	36.6	2	29.9	1	66.7
Dixie	2	34.3	0	..	2	92.9
Duval	145	81.1	31	26.6	114	183.6
Escambia	39	68.4	21	49.5	18	123.3
Flagler	3	90.9	0	..	3	187.5
Franklin	1	15.2	0	..	1	43.5
Gadsden (Ex.)	16	59.5	2	18.2	14	88.1
State Hospital	21	523.4	13	503.5	8	559.4
Gilchrist	0	..	0	..	0	..
Glades	2	75.0	0	..	2	335.0
Gulf	1	32.3	0	..	1	90.3
Hamilton	3	30.6	2	34.5	1	25.0
Hardee	2	17.2	0	..	2	222.2
Hendry	2	54.1	0	..	2	250.0
Hernando	1	17.9	0	..	1	62.5
Highlands	9	79.6	5	61.7	4	125.0
Hillsboro	123	77.0	73	56.4	50	165.0
Holmes	2	13.5	1	7.1	1	125.0
Indian River	4	44.9	4	64.5	0	..
Jackson	8	22.2	1	4.4	7	51.9
Jefferson	1	7.4	0	..	1	10.5
Lafayette	2	47.2	2	54.1	0	..
Lake	5	17.1	4	19.1	1	12.0
Lee	9	54.2	1	7.6	8	235.3
Leon	14	51.5	2	18.0	12	74.5
Levy	8	61.5	2	26.0	6	113.2
Liberty	0	..	0	..	0	..
Madison	11	63.2	3	35.7	8	88.9
Manatee	20	86.6	13	77.4	7	111.1
Marion	15	48.5	2	12.5	13	87.2
Martin	3	57.7	2	58.8	1	55.6
Monroe	6	45.2	2	18.5	4	161.8
Nassau	1	10.9	1	17.4	0	..
Okaloosa	3	25.0	3	27.0	0	..
Okeechobee	0	..	0	..	0	..
Orange	24	40.0	12	26.1	12	85.7
Osceola	6	61.7	3	40.1	3	133.9
Palm Beach	23	43.2	10	28.2	13	73.4
Pasco	9	79.6	7	73.7	2	111.1
Pinellas	52	80.0	33	64.0	19	141.8
Polk	35	41.6	17	25.7	18	99.4
Putnam	11	60.1	1	9.6	10	126.6

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M. D., *Director*

Deaths from Tuberculosis (All Forms) and Rates per 100,000
Population, by Color and by Counties, Florida, 1936 (Continued)

COUNTIES	TOTAL		WHITE		COLORED	
	Deaths	Rates	Deaths	Rates	Deaths	Rates
St. Johns	10	56.9	2	17.1	8	136.7
St. Lucie	3	31.6	2	33.9	1	27.8
Santa Rosa	5	31.6	5	36.0	0	.
Sarasota	5	35.5	1	9.5	4	111.1
Seminole	10	43.7	2	17.2	8	70.8
Sumter	4	39.9	2	28.3	2	67.7
Suwannee	2	11.6	0	..	2	34.5
Taylor	5	45.1	1	13.6	4	107.4
Union	8	95.2	1	19.2	7	218.8
Volusia	23	44.0	10	28.0	13	78.3
Wakulla	1	16.1	0	..	1	38.5
Walton	1	7.2	1	8.6	0	.
Washington	4	30.8	2	20.0	2	66.7

BUREAU OF VITAL STATISTICS

EDWARD M. L'ENGLE, M. D., *Director*

Deaths from Tuberculosis (All Forms) and Rates per 100,000
Population, by Color, 1917 to 1936, Inclusive, Florida

YEARS	TOTAL		WHITE		COLORED	
	Deaths	Rates	Deaths	Rates	Deaths	Rates
1936	905	55.1	387	33.2	518	108.8
1935	903	55.9	397	34.7	506	107.9
1934	953	60.1	381	33.9	572	123.9
1933	1,039	66.9	398	36.1	641	142.1
1932	1,093	71.5	395	36.5	698	156.2
1931	1,067	70.8	427	40.1	640	144.8
1930	1,015	68.6	432	41.3	583	134.0
1929	1,014	70.8	416	41.3	598	140.6
1928	1,102	79.7	481	49.7	621	149.5
1927	1,097	82.2	463	49.8	634	156.4
1926	1,187	92.3	519	58.3	668	169.0
1925	999	80.8	426	50.0	573	148.7
1924	1,054	88.7	457	56.2	597	159.1
1923	1,079	94.7	490	63.3	589	161.2
1922	1,019	93.5	440	59.9	579	163.0
1921	951	91.3	401	57.6	550	159.3
1920	1,016	102.3	423	64.3	593	176.8
1919	993	103.7	461	73.4	532	161.6
1918	1,084	115.9	494	81.2	590	180.4
1917	1,085	118.9	472	80.3	613	188.7

The Local Registrars are reminded that the end of the year is approaching and are urged to make a special effort to have a complete report of all births and deaths for the month and year in the Central Bureau on time.

Failure on the part of any one responsible for reporting—local registrars, doctors, midwives, funeral directors—results in delay and added expense to those who have a right to look to this office for information and may occasion real injustice in those cases where such information is required. Therefore, please be prompt and thorough.

THE HEALTH UNIT AND TUBERCULOSIS

A. B. McCREARY, A. B., M. D.

No effective control measures for tuberculosis, or any other disease can be carried on without the necessary machinery for their promotion. Lay organizations become enthused from time to time and inaugurate sporadic campaigns which flourish for awhile and ultimately flicker out because of the lack of sustained effort; however, the work of interested lay groups can be made very valuable when coordinated and guided by an adequate and competent full time health service.

The health department locates early sufferers of tuberculosis, as well as those in the more advanced stages of the disease. These patients are recorded, an epidemiological report is made, and through the nursing service and other agencies of the department in cooperation with the practicing physician, the patient is not only instructed in the proper personal care for his or her own benefit but also how to protect others. Without full time health service it is not infrequently that tuberculosis patients reach the later part of the second stage before a diagnosis is made. These individuals become a menace to society which can only be eliminated by a knowledge of the existence of the disease and a desire to cooperate in preventing its spread, both by arresting the progress of the disease and by the adoption of careful habits.

The health department can be of invaluable service to the physician and the patient in assisting in early diagnosis.

The tuberculin testing of school children and the X-ray examination of the indigent in collaboration with the family physician means early discovery, and subsequently, early arrest or cure of the disease, to say nothing of the hundreds of school children that are protected through this knowledge and by the use of better sanitary methods for prevention of further spread.

Control measures are helpless unless there is a knowledge of when, where, and under what conditions the disease exists. The primary duty is to locate the tuberculous patients,

see that they are aware of their condition, and through a program of health education, teach them to care for themselves and their neighbor.

The contacts and suspects are all catalogued, and through visits to their homes by the department personnel, they are given instruction in necessary precautions. That hundreds of new patients are yearly prevented by this procedure is obvious and that hundreds of patients are discovered through the same methods cannot be doubted. Early discovery means early cure.

The full time health unit is the only means of properly controlling this or any other disease.

The follow-up work by the health unit of the indigent patients is an indispensable factor if real protection is to be attained. Approximately one thousand Floridians die annually from tuberculosis. Statistics show that there are at least ten active tuberculous sufferers for every death recorded, yet there were only six hundred twenty-seven patients reported during 1936. During the past five years there was an average of 982 resident deaths. During this same period there was an average of only 621 tuberculous patients reported to the Bureau of Epidemiology. What became of the other 9193? They were not reported. And they are going their way coughing and expectorating, undetected, unmolested and uncontrolled—continuing to strew the germs of tuberculosis directly by coughing and exhaling in your face and indirectly by using the same drinking and eating utensils in public places, which are all too frequently improperly sterilized. Here the health unit proves its worth through closing this one channel of spread by the enforcement of sanitary measures.

It is impossible to control any disease unless it is reported, and it is apparently impossible to get a disease reported unless there is full time health service.

WHAT ARE WE GOING TO DO FLORIDIANS?

TUBERCULOSIS MORTALITY IN YOUNG WOMEN

R. N. JOYNER, M. D.

Director, Bureau of Maternal and Child Health

In any discussion of tuberculosis, mention is always made of the fact that the mortality rate has declined steadily during the past twenty-five years. There has been a reduction of 61 per cent in the death rate during the twenty-eight year period, 1900 to 1927. A mere consideration of this decrease is likely to create the impression that deaths from tuberculosis in all age groups, male and female, have been reduced proportionately. This, however, is not the case. During the same twenty-eight year period, the specific tuberculosis death rate for males aged 15 to 19 dropped 58 per cent, for males aged 20 to 24, 64 per cent, while the death rate among females aged 15 to 19 declined only 46 per cent, and for the 20 to 24 year old females 53 per cent.

A further study of tuberculosis deaths reveals that the peak of mortality for both sexes and all ages falls among girls aged 15 to 25, and that the rate for this age group is from 50 to 90 per cent higher than it is among young men of the same age.

The difference between the male and the female rates is not indicative of a rising death rate among young females. On the contrary, there has been a steady decline in tuberculosis deaths among young women. It simply means that the decline among the female group has been less rapid than among the male. The problem, then, is to discover why the toll taken by tuberculosis is higher among young women than it is among any other age group.

Following the war all sorts of dire prophecies filled the air when young women began their career of destruction of the existing ideals of feminine behavior. They began to compete with men in industry and commerce, they refused to wear the voluminous clothes of their mothers, they entered the realm of athletics; dieting and the smoking of cigarettes became a fad, and subsequently a necessity. Such blatant disregard for

conventions was naturally viewed with alarm. The seriousness of tuberculosis among young women began to demand attention and there developed a tendency to connect it with woman's recently acquired independence. This tendency gave rise to the impression that tuberculosis among young women was on the increase. This impression is entirely erroneous, for as far back as 1900 reliable information demonstrated that even then tuberculosis was a serious problem in young girls.

Most of the early theories advanced to explain the high tuberculosis death rate among this age group have been disproved. A very popular theory is that relating to modern dress, low shoes, silk stockings, light underclothing, short skirts and whatnot. In 1820, Dr. Nathan Smith ascribed the prevalence of tuberculosis among young women to the inadequacy of their dress. Certainly if the women of 1820 were underclothed, and if this fact had any bearing upon the incidence of tuberculosis among them, the occurrence of that disease among the women of 1930 would be overwhelming. Cigarette smoking, dieting, the entrance of women into the fields of commerce, industry, and athletics, the "dangerous practice" of shampooing the hair during the winter months, and the Eighteenth Amendment have all been discarded as causative factors of tuberculosis in women.

Medical opinion has for a number of years been inclined to the belief that the extra strain of physical development during adolescence renders the young girl more susceptible to all kinds of infection. It is logical to assume, therefore, that tuberculosis would be more prevalent at that age than at any other.

Pregnancy has also been considered a major factor in the development of tuberculosis. If it is, we might expect the first indications of disease to follow the termination of preg-

nancy within a comparatively short time. Statistical studies have demonstrated that this actually does occur. Almost an entire year is required for a complete return to normal health and function following pregnancy. It may be assumed then, that any case developing recognizable tuberculosis within one year following the termination of pregnancy was influenced by that pregnancy. Pregnancy probably has little or no deleterious influence upon active tuberculosis, but because of the parasitic action of the growing baby, the calcium supply of the mother is reduced, and healed areas of tuberculosis infection are likely to break down and reinfect the mother, giving rise to active disease. In other words, a moderately active case of tuberculosis might successfully complete a pregnancy without aggravating the disease. On the other hand, a young woman with no active disease but the healed areas of tuberculosis infection in her lungs

may be likely to reinfect herself, and to lack sufficient resistance to prevent disease. Pregnancy is more directly a factor in the development of tuberculosis than a means of hastening death.

Tuberculosis among young women is therefore primarily a problem of the child-bearing period. The age period of maximum death rate on women coincides with that of the highest child-bearing rate, namely 20 to 30 years. This same period constitutes a more or less severe strain upon the strength and general health of young women. It would not be amiss for us to recognize the fact that the changes accompanying adolescence and early adult life do play an important role in the causation, not only of tuberculosis, but other infections as well. More frequent and more thorough physical examinations should be made of young women, and more particularly the young married women who are contemplating pregnancy.

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